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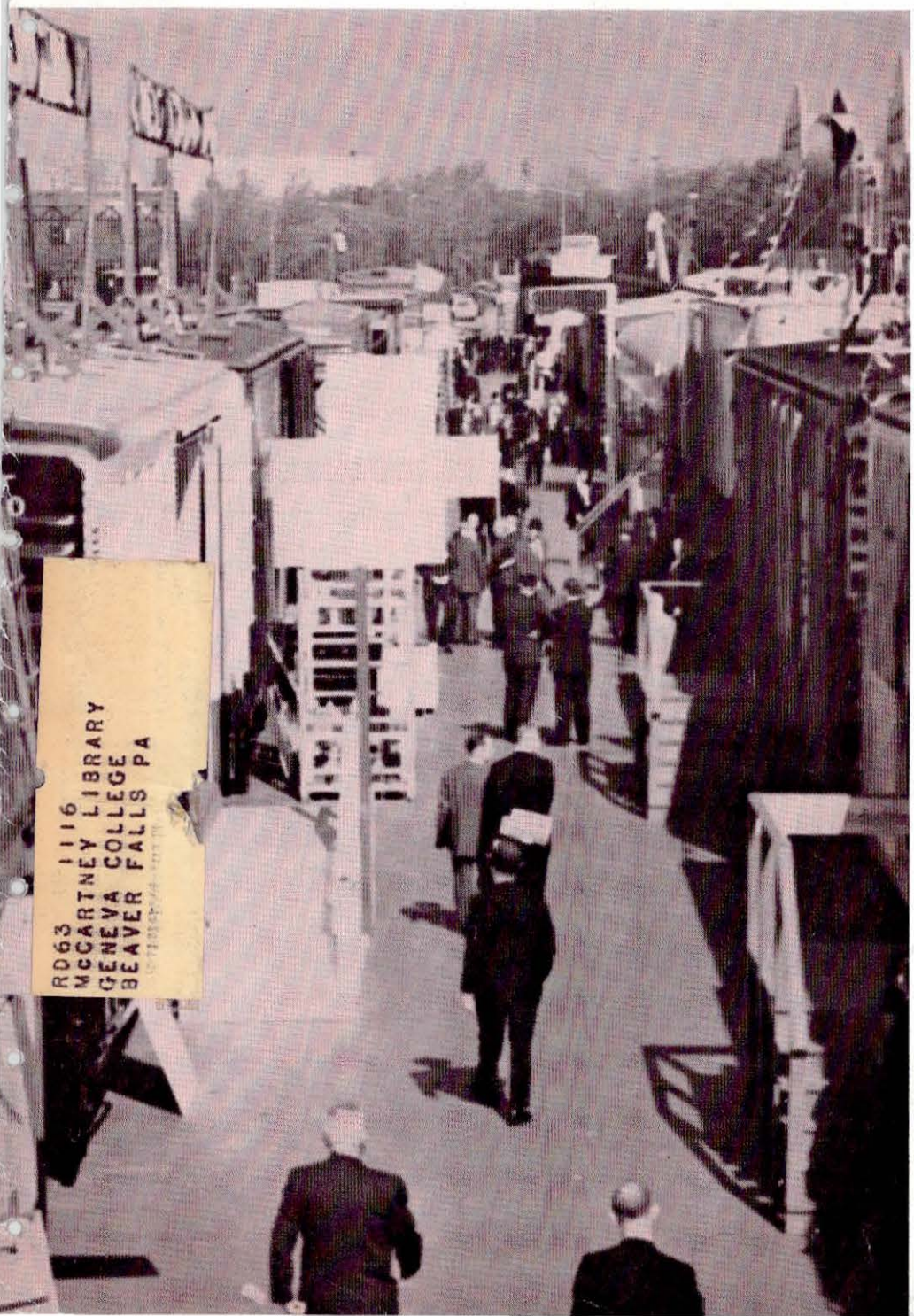
Seattle's transportation ills may require a **rapid-transit** recovery . . . . . p. 19

October 21, 1963

RAILWAY AGE WEEKLY



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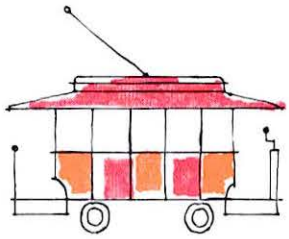
SPECIAL REPORT ON THE EXPOSITION:

Railroading's biggest show proved to be its greatest

p. 9



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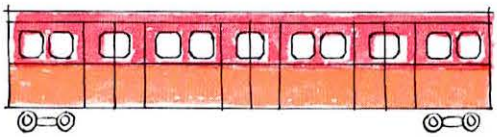

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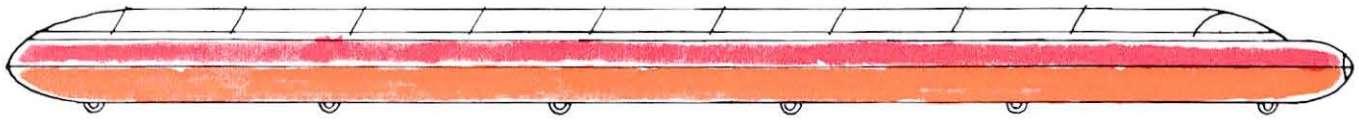

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RAILWAY AGE WEEK AT A GLANCE

October 21, 1963 • Vol. 155, No. 16

SPECIAL EXPOSITION REPORT

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Seattle's hope—rapid transit?

Authorities there are now sifting information gathered in studies of transport problems. Rapid transit to tie the area together is a possible solution. **p.19**

Transit achieving new status in cities

The ATA convention was told that transit—a potential museum piece in the eyes of some skeptics only a few years ago—is now getting priority in space-age municipalities **p.24**

The Action Page—Misinformed employees

Union papers are giving employees a distorted picture of the railroads' situation. How can the facts be effectively communicated? **p.42**

Short and Significant

The eastern railroads' rate test . . .

to encourage heavy loading of government freight will continue until Mar. 31, 1964. Experimental rates are combinations of per-car, per-mile and cents-per-100-pound charges.

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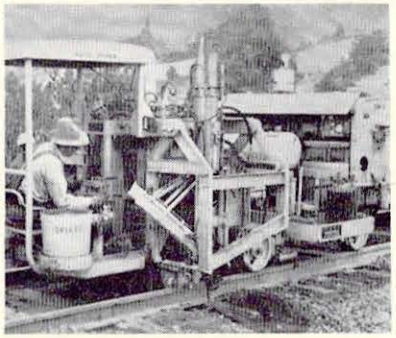

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RAILWAY AGE WEEK AT A GLANCE

Pension and jobless-pay acts . . .

are now on sounder bases. President Kennedy has approved legislation implementing the plan for improving the Retirement and Unemployment systems.

The railroad strike-insurance pact . . .

won't be upset by the U.S. Supreme Court. It has refused to review the Long Island case, thus leaving in effect a lower-court dismissal of BRT's complaint.

Frisco plans to transfer . . .

more than 400 employees from St. Louis to Springfield, Mo., where the road will build a $2 million office building. Headquarters will remain in St. Louis.

A $200 million investment . . .

would be required to bring Rock Island facilities up to Union Pacific standards if the two roads were merged, UP President A. E. Stoddard said last week.

Fines totaling $23,450 . . .

were paid in August by 23 railroads for 92 violations of the Safety Appliance, Hours of Service, Accident Reports and Explosives and Combustibles acts.

Southern President D. W. Brosnan . . .

will rejoin the Florida East Coast board. The ICC reversed itself to let him serve without like directorships being held by Atlantic Coast Line and Seaboard executives.

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Current Statistics

Operating revenue	
6 mos., 1963	4,714,888,444
6 mos., 1962	4,703,908,621
Operating expenses	
6 mos., 1963	3,683,992,541
6 mos., 1962	3,712,959,223
Taxes	
6 mos., 1963	464,644,151
6 mos., 1962	523,652,505
Net railway operating income	
6 mos., 1963	359,753,801
6 mos., 1962	275,271,282
Net income, estimated	
6 mos., 1963	270,000,000
6 mos., 1962	181,000,000

Carloadings revenue freight	
41 wks., 1963	22,785,157
41 wks., 1962	22,772,492
Freight cars on order	
Sept. 1, 1963	20,749
Sept. 1, 1962	12,429
Freight cars delivered	
8 mos., 1963	27,564
8 mos., 1962	26,706
Serviceable cars	
Sept. 1, 1963	1,410,178
Sept. 1, 1962	1,437,496
Cars awaiting repairs	
Sept. 1, 1963	118,135
Sept. 1, 1962	135,257

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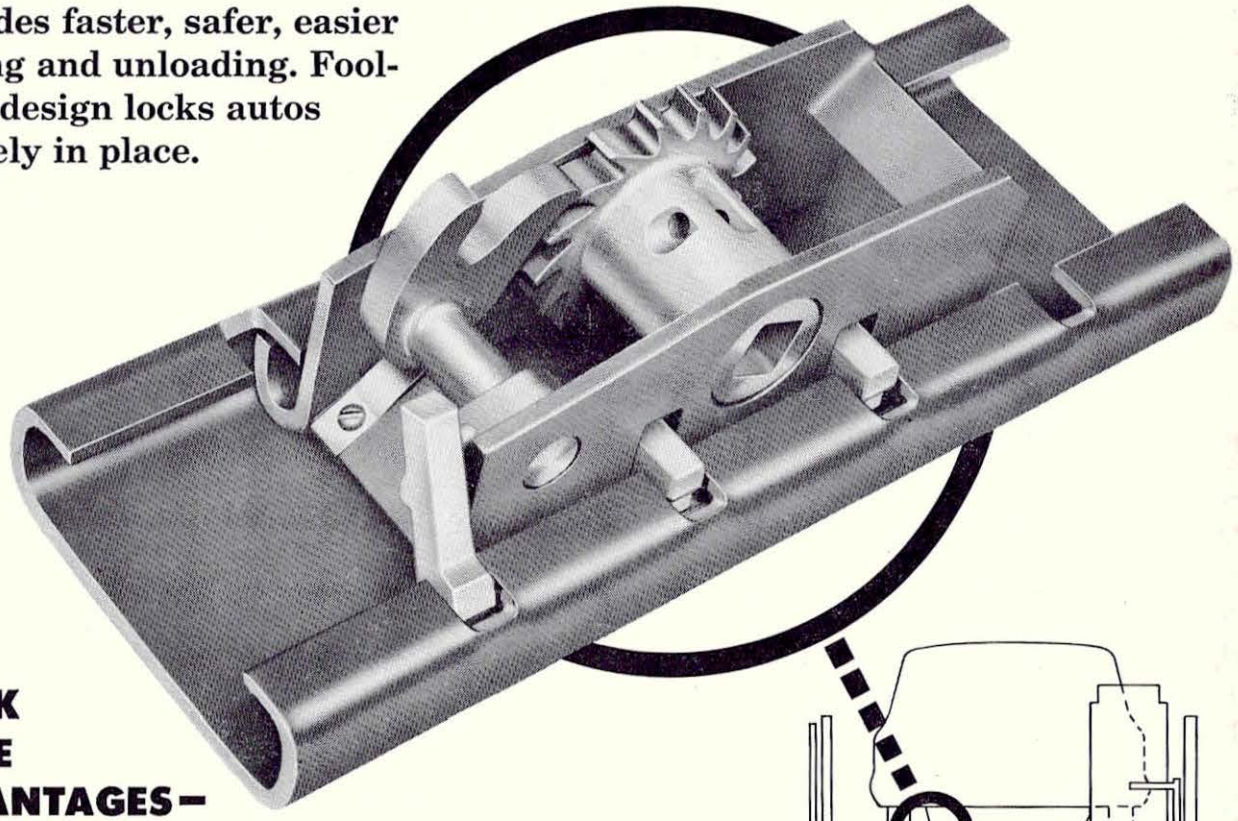

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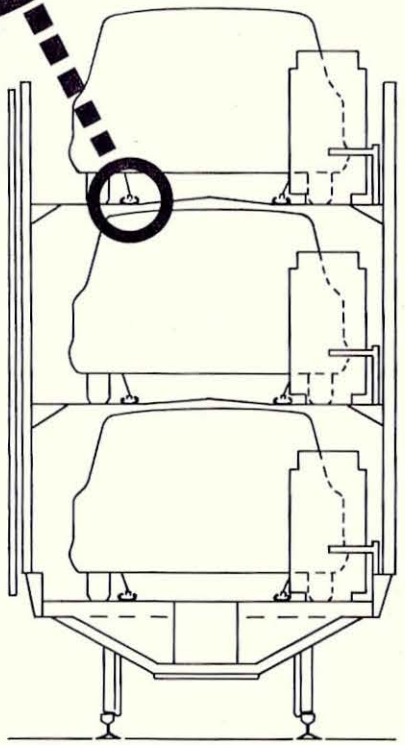

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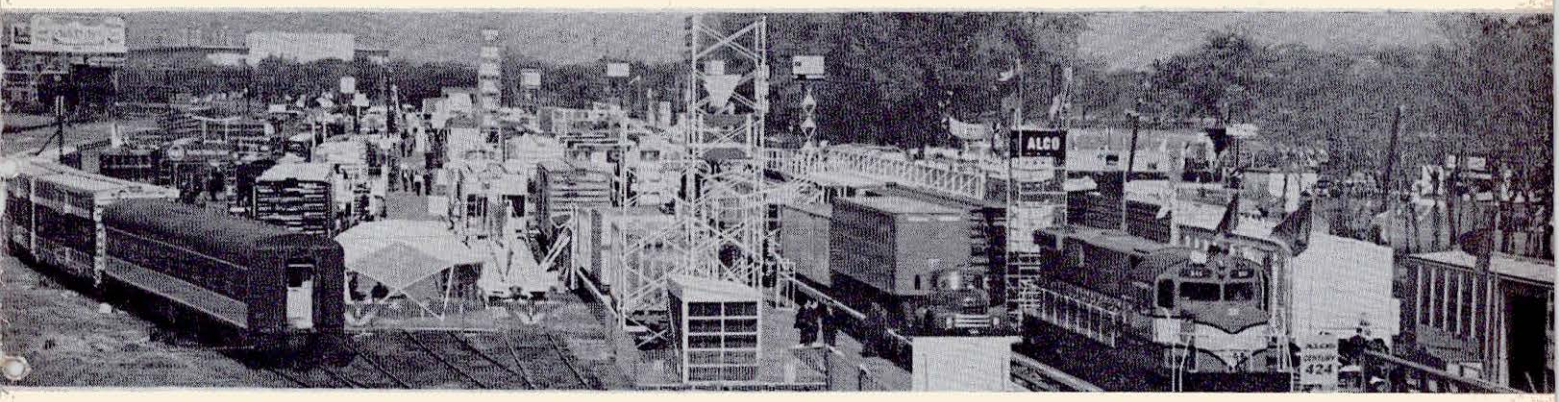
SPECIAL REPORT ON CHICAGO EXPOSITION

Progress: the most important product shown



Showcase for U.S. railroading: track exhibits at the American Railway Progress Exposition.

For an old industry, the railroads displayed plenty of new zip and vitality at what is being hailed as their greatest show ever.

For the American Railway Progress Exposition, the big word was "progress." It could have been spelled out in neon tubing 50 feet high, blazing high above Chicago's McCormick Place exhibit hall and above the track exhibits at the Illinois Central's 31st Street Yard. It was the key theme in virtually every address, every report presented at meetings of more than a score of railroad, supplier and shipper organizations. And it was probably the key impression established with the thousands of Midwesterners who walked through the track exhibit on the two days it was open to the public.

The eight-day Exposition was, in many ways, a clear demonstration of new vitality in an old industry.

● **'Blockbuster' exhibit.** The Combined Railway Suppliers Exhibit was a blockbuster. More than 350 supply companies assembled more than $40 million worth of equipment—the evidence of what has been, across the board, the greatest decade of technological progress in the industry's long history. It was an impressive exhibit for railroad men—and an awesome one for the general public.

Exposition meetings covered almost every phase of railroad operations—and drew close to 40,000 registrations over the seven working days of the show. And the tone of the meetings fitted well with the theme established by the exhibits: progress.

A visitor whose impression of the railroads centered on such words as "dull," "decadent" or merely "complacent" would have gotten a quick shock by sitting in on the working sessions—whether they involved engineers, mechanical officers, accountants, signal-and-communications experts or operating-transportation officers. The emphasis—positive emphasis—was on problem-solving: How

to make best use of recent technological innovations; how to make sure the rapid rate of technological progress is maintained; how to attain the twin goals of greatest efficiency at lowest cost.

• **Nobody wants to be second.** Speakers from within the industry—such men as the AAR's Loomis, Buford and Keller, PRR's Saunders, NYC's Perlman, SP's Biaggini and many others—gave solid indication once again that today's corps of top railroad executives is a hard-hitting lot that won't be satisfied with second place in anybody's league. And when speakers from outside railroading took their turn at the rostrum—among them the publisher of a major newspaper, the chancellor of a large university—the message continued to come through loud and clear. Quietly, firmly, these men added weight to the railroads' case—on such varied topics as research, equality of treatment by government, relaxation of regulation, elimination of featherbedding.

Several railroads — including Missouri Pacific and Burlington—added an opening zing to the Exposition by breaking the news on multi-million-dollar motive power and equipment programs for 1964.

Supplier representatives generally were an enthusiastic group. More than a few, after checking to make sure no competitor was within earshot, allowed as how "business is good."

• **Biggest—and greatest.** The Exposition opened on an upbeat—with railroad and supplier representatives, the mayor of Chicago and a stunning blonde chosen as Miss Railroad participating in the official ribbon-cutting down at the track exhibit—and the pace never lagged. From the circusy air of the track exhibit to the brass-tacks discussions in the meeting rooms, the show turned out as its railroad and supply-company sponsors had hoped: Railroading's biggest show was, indeed, its greatest.

The spirit of the Exposition could be summed up in many ways. Stuart T. Saunders, chairman and chief executive officer of the Pennsylvania, looked at the meetings and the exhibits as a splendid demonstration of what has been done—and as a foundation on which the industry can build even greater accomplishments.

Mr. Saunders urged the railroads not to relent in their efforts to take maximum advantage of modernization, to effect the economies of merger, to win freedom from excessive regulation.

Watching Washington, which usually appears in this space, is on page 24 of this issue.

SPECIAL EXPOSITION REPORT

Engineering spotlighted as profit-making area

With imagination, new ways can be found to cut waste and improve methods, engineering and signal men were advised.

Railroad engineering work may lack a bit of the glamour it had back in the days when railroads were being built—but not much. And engineering departments today are finding themselves increasingly in the forefront of the technological revolution that is sweeping the industry.

The vital role of the engineer was spotlighted time and again over the past two weeks as the American Railway Engineering Association, the Roadmasters' and Maintenance of Way Association and the Bridge & Building Association met at the ARPE.

B. F. Biaggini, executive vice president of Southern Pacific, put it bluntly: "Your profit-making opportunities are as wide as the scope of your imagination in finding ways to cut out waste and develop new and better methods and equipment."

• **Profit-creating potential.** Engineers, he told members of AREA and the Communications & Signal Section, have "one of the greatest profit-creating potentials of any group on the railroad"—but realization of that potential demands that engineers look beyond the confines of their own departments.

"The time is long gone," Mr. Biaggini declared, when the engineer can afford to look at his job as an end in itself. As railroading has become increasingly complex and the pressures of competition have continued to increase, it has become more and more imperative that narrow departmental considerations give way wherever the ultimate benefit to the company is involved.

"Looking beyond the narrow considerations of your own immediate job means that sometimes you have to be willing to do things that may increase your departmental costs.

"But if it costs your department $100 and will bring in $200 net revenue or net saving to any department of the company, believe me it's worth doing. All this calls for a lively interest and the cultivation of a broad knowledge of the objectives and problems of other departments."

• **Old procedures are suspect.** SP's executive vice president also urged AREA and C&S Section members to be suspicious—to develop a "persistent suspicion of any procedure that has been going along in just about the same way for any considerable length of time: "Can we get along without it? Is there a cheaper way to do it just as well? Is there a better way to do it more profitably?"

The engineer, he said, should guard against the subconscious urge to build, for example, the best bridge possible, instead of the bridge which will do the job adequately and at far less cost.

Signal engineers were similarly warned to remember that there is much of the railroad where a highly sophisticated signal system is not justified.

Mr. Biaggini urged designers and equipment manufacturers to develop simplified signal or CTC systems at a cost to make them economically justifiable over thousands of miles of railroads which cannot support present sophisticated signal systems.

"Every project for which you intend to recommend a capital expenditure should first be analyzed most carefully in terms of over-all savings," he asserted.

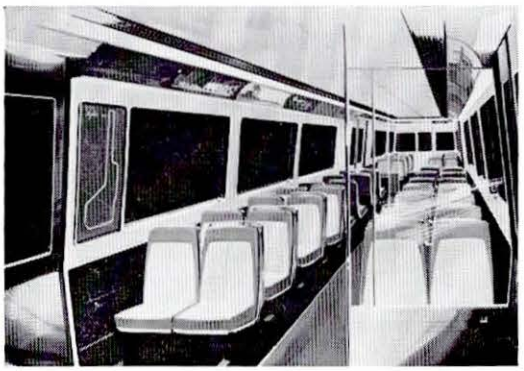
Why is the savings angle so vital? Because "every dollar you save is as good as $5 worth of new traffic, as it affects net revenue."

Much the same hard-hitting philosophy came later from J. H. Lloyd, vice president-operations of the Missouri Pacific, who had some straight talk for members of the Roadmasters' and B&B groups on the subject of mechanization of maintenance work.

• **Mechanization can't be stopped.** Mechanization, he declared, is a process which "nothing or no one can stop. . . . Ignorance, reluctance to change, selfishness and apathy may dam it up momentarily, but it cannot be stopped. We must move with it or lose our future to competition."

Mr. Lloyd acknowledged that recent developments in maintenance equipment have been outstanding—but he also expressed the opinion that they're "not adequate for today."

This is true, he said, "because of the rapidly changing conditions which are



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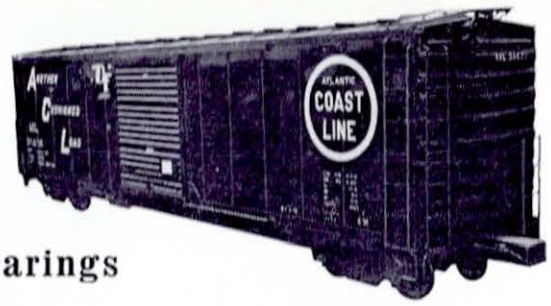

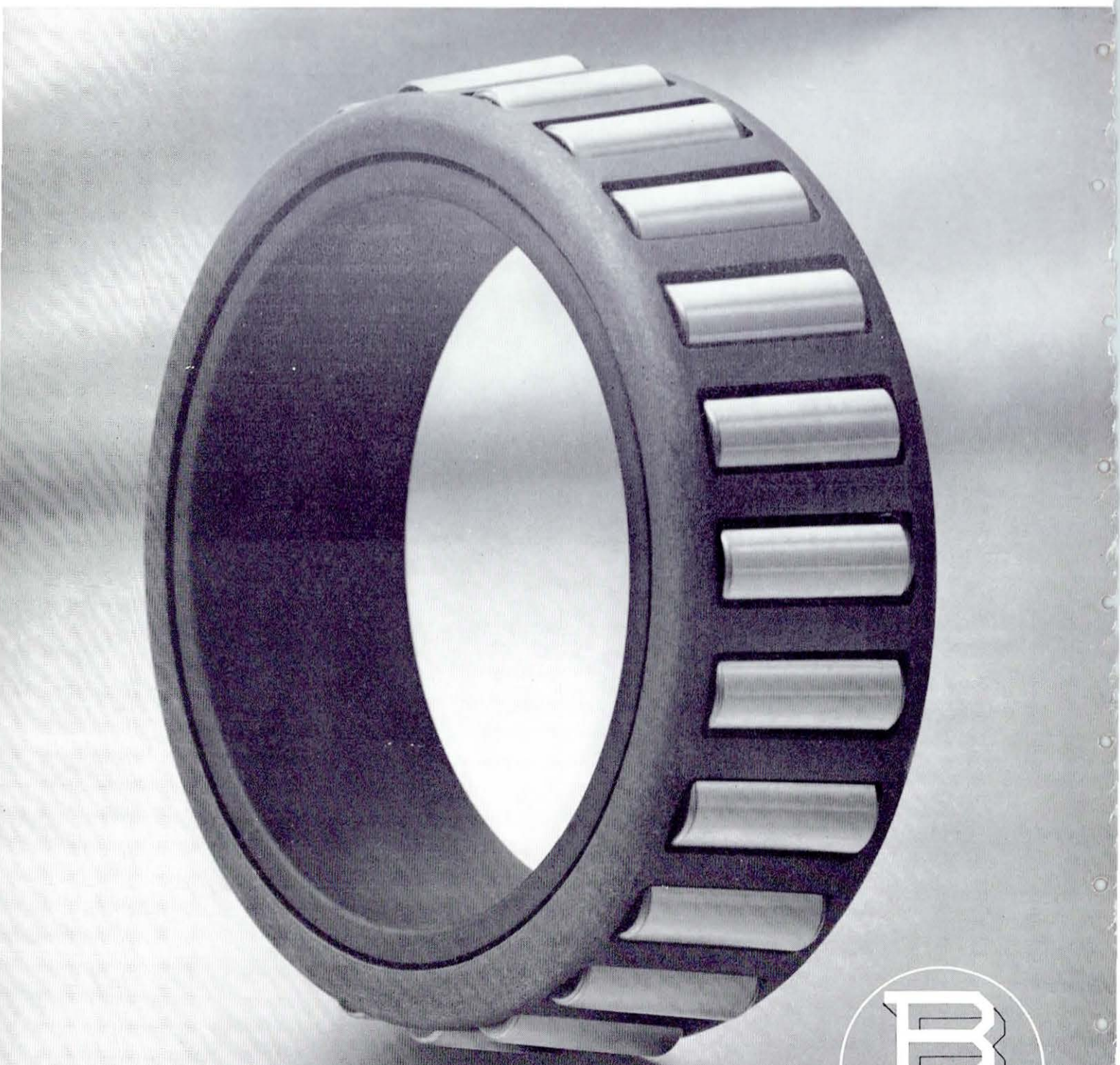

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BRENCO
BEARINGS

Lloyd: 'Greater attention to production control'

creating a demand for cost savings, production-line techniques, and a trained organization to carry out specific plans."

There is, further, he said, a "strong need for track equipment that requires minimum maintenance and parts replacement."

With these needs in mind, Mr. Lloyd turned to another question: "What can we as maintenance men do to help improve our situation and find answers to these problems for tomorrow?"

One possible approach: greater attention to production control.

"Such control, he said, "can optimize manpower, materials, and increase the availability of equipment."

Throughout his address, MP's vice president-operations bore down on the angle of flexibility in thinking—how to make the best applications of the technology now available and how to promote stepped-up technological progress.

"It is not enough to develop a sound plan from a technical point of view. The human aspect must also be considered and communicated. Here a truism falls into place: the concept is only as good as the men behind it."

● **Supervisor's role.** The presence of "outdated thinking and resistance to change is a tremendous communications barrier to top management," Mr. Lloyd said.

"The supervisor's use of communication can have an effect on employee morale and in turn have impact on day-to-day work. By merely taking time to inform an employee a supervisor can create a feeling of recognition that has real effect on his work.

"The union-sponsored rules," Mr. Lloyd continued, "make it difficult to introduce new practices, but when each of the limits has recently been modified few railroad officers have explored actively the possibilities, particularly the technological possibilities, which are now open to them."

At this point, Mr. Lloyd referred to a recent article in Railway Age which described a new approach for owning and managing railroad work equipment and roadway machines.

"Basically, it involves setting up within the corporate body an organization that would rent new equipment to the using department."

Mr. Lloyd said the idea appeals to him because "we must not overlook the cost that accompanies our mechanization age. Idle machines carry the burden of ownership costs such as interest, depreciation and obsolesence."

A system suggested like that in the article, Mr. Lloyd continued, would force the user of the equipment to estimate and control job costs more accurately because of rental rates. "The user would be able to make an economic evaluation on a competitive basis."

The busy scene at McCormick Place as some of the 40,000 railroad, supplier and shipper representatives arrived for the ARPE sessions.

Such a system Mr. Lloyd felt, would help management "determine the risk factor in appropriating capital funds for new equipment. It would help identify very quickly any specific type of machine that is not paying its way."

● **How to increase land use.** Engineering officers also got up-to-the-minute reports on a variety of other topics —including air rights devolpment and economies possible through mergers.

The view on air rights came from Harry J. McNally, chief engineer-New York improvements of the Pennsylvania. Engineers, he noted, can be of great help in devising ways to increase the use of railway lands. And, "their engineering viewpoint has value," he said.

As an example, he referred to the matter of planning. The railroad engineers set the basic specifications that an outside architect or structural engineer will use in an air-rights project, and will specify certain track clearances. The designer then plans the proposed structure around the existing tracks. However, the railroad engineer can see and suggest some track changes that will cost a few hundred dollars but will thereby save many thousands of dollars in structure costs.

Mr. McNally also had this reminder: "There are many pieces of land used for railroad purposes which could be covered with a usable slab, providing for additional purposes, and produce considerable income for our companies.

"The work to provide a cover could be done at a cost within the value of adjacent bare land," he said. "Any additional value remaining after a slab or cover is provided will produce additional income."

In addition, Mr. McNally pointed out that each time the average value of each lineal foot of line is increased a dollar, and the land is put to work for other than railroad transportation, the return from that land can be increased. He estimated that this return could be from $40 million to $50 million year for all railroads in the United States.

● **Commentary on mergers.** W. L. Young, chief engineer of the Norfolk & Western, provided the commentary on mergers — specifically the N&W-Virginian combination, where predicted savings (in excess of $12 million annually) were realized within just a few years after merger.

The savings were calculated by a committee appointed in 1958 to look into the advisability of making the merger. An engineering representative on this committee, in addition to sitting in on all general discussions of the problems involved, made a study of all problems relating to construction and maintenance, as well as the economies that could be effected by the consolidation.

The engineering representative also cooperated with the road's operating personnel in studying existing grades on the two lines and the economic justification of building connections between them to take advantage of heavy tonnage trains from the coal fields to terminal facilities at the Port of Norfolk.

MECHANICAL REPORT ON PAGE 14 ►

SPECIAL EXPOSITION REPORT

The mechanical officer's new role

Broadened responsibilities of mechanical departments in regard to automation, new freight-car specifications and industrial engineering got a thorough going over at Chicago sessions.

Mechanical departments today are a lot different than they used to be—and so are the demands on mechanical department officers.

The point came through—loud, clear and frequently—during the past two weeks as, first, the AAR Mechanical Division and, later, the four Coordinated Mechanical Associations met in conjunction with the American Railway Progress Exposition.

Among the major topics: automation . . . proposed new specifications for freight cars . . . and the growth of industrial engineering as an element of mechanical-department operations.

Automation—normally a subject reserved for the electronics experts—got a thorough going over at a Mechanical Division panel discussion which featured W. M. Keller, vice president—research, AAR; G. M. Magee, director of engineering research, AAR; J. A. Little, general manager, Quebec North Shore & Labrador, and Paul V. Garin, manager, mechanical engineering and research, Southern Pacific.

Their point: aspects of automation—remote control, automatic control and complete programming—are getting increasing attention from mechanical officers.

Mr. Little, whose railroad has, perhaps, the most fully automated train-operation system in existence, outlined six conditions necessary for successful operational automation: reliably equipped and maintained rolling stock, preferably all of the same type; reliably equipped and maintained track structure; one type of traffic; sufficient and steady traffic to justify capital expenditures; means of auxiliary access, either by roadway or by double-track installation, to all points along the line; equipment providing feed-back of "situation reports" to the railroad's headquarters on longer lines or on those with varied types of traffic.

EMD's track exhibit featured new-type locomotives.

● **Changes brought by diesels.** SP's Mr. Garin concentrated his attention on changes in maintenance and repair practices since the change over from steam to diesel power—changes that have been drastic in most areas.

The basic objective, he noted, is to cut costs and improve efficiency by applying that amount of automation which the process in question can justify. Automation of repairs and maintenance, he told mechanical officers, suggests itself where repetitive handling of standard components is involved—as in cleaning systems, wheel shops, one-spot car-repair and locomotive-repair operations and air-brake shops.

A number of improvements in maintenance and repair practices have been made, Mr. Garin said—but many more are possible. His conclusion: Improvement is a matter of "what will we have to do tomorrow when we can no longer afford to continue what we are doing today."

SP's mechanical engineering-research expert noted the growth of the industrial-engineering function on a number of roads because of increased automation of shop and other operations—and New York Central President A. E. Perlman landed hard on the same subject.

The basic ingredients of industrial engineering, explained Mr. Perlman, are "common sense, good economics and constructive discontent"—all essential elements in the industry's double-pronged drive to cut costs and raise productivity.

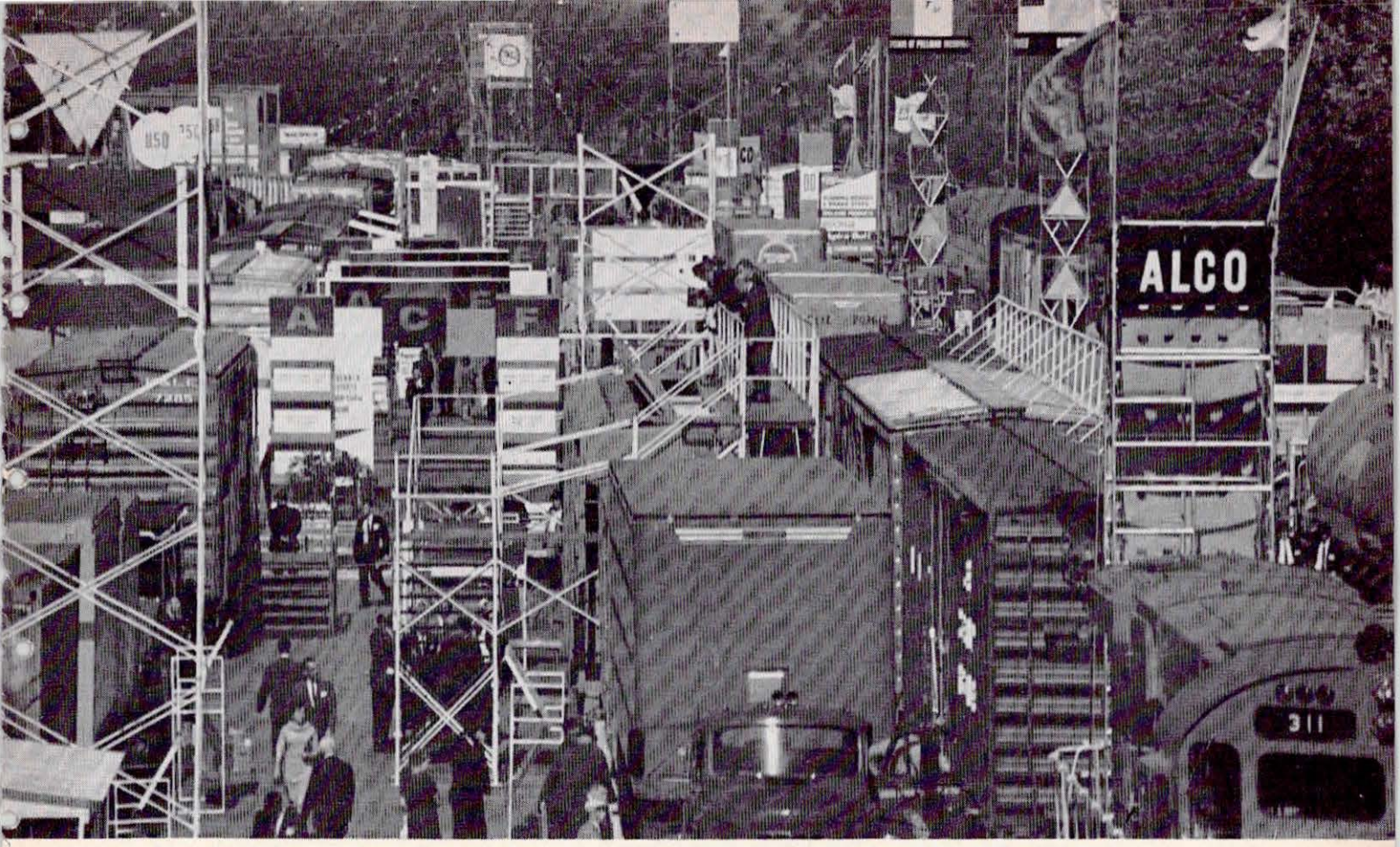
Mr. Perlman took note of the fact that many mechanical officers have had a "suspicion" of the professional industrial engineer.

But, he said, "these men can concentrate with the time and techniques necessary to determine significant factors in industrial problems which traditional railroaders might overlook. . . . The officer who faces a heavy burden of administrative duties will not have the time to equate all the detailed data required."

Typical of the concerns of industrial engineers in the New York Central's mechanical department, said Mr. Perlman, are:

- Construction of freight cars.
- Servicing of locomotives.
- Inspection of locomotives and cars at terminals and in yards.
- Cleaning of locomotives and cars.
- Performance of running repairs on locomotives and cars.
- Shop repairs on locomotives, cars and parts.
- Studies of utilization and replacement of equipment and facilities.
- Demolition and salvage of equipment.

● **Practices being re-evalued.** Mr. Perlman explained that these activities involve industrial engineers in work simplification, layout improvement, time study, process specification, manpower control, materials handling, equipment design, quality control, material and work flow, capacity utilization and production control. In all instances engineers are responsible for the economic justification of project expenditures. Throughout the railroad industry today, he said, industrial engineers are en-



Side-by-side showings of the latest designs in cars and locomotives offered by ACF and Alco.

Part of the big General Electric exhibit at the Illinois Central's 31st Street Yard.

gaged in redesigning shops to obtain the advantages of mass production techniques in both the construction and repair of equipment.

"The revolution in competition and technology forces a drastic re-evaluation of standard practices, and railroad mechanical departments today find it necessary to search for new materials and methods to meet these rapidly changing conditions," Mr. Perlman pointed out. "Despite a long history of technological innovation, certain railroad tools and practices tend to become fixed and standard. Just as in many other long-established industries, some methods go unchanged, indeed unchallenged, for many years. Railroads have grown in size until their operations are extremely complex and far flung.

"As a result, managers who face the daily task of administering a vast enterprise sometimes find it necessary to rely upon standard plans and instructions, in the same manner that our huge military organization controls its complex, world-wide operations. The explosively expanding technology and rapidly changing competitive factors of recent years have forced the rapid obsolescence of most of these once-reliable standard plans and instructions. . . . Thus, technological and competitive developments are producing a new breed of mechanical department officer—a breed of man who has developed no 'mental obsolescence,' who today is continually searching for a better standard than is to be found in the materials and methods of yesterday."

● **New freight-car specs.** Also in the area of "what's new," mechanical department officers heard about new freight-car specifications which may soon be submitted for AAR member-road approval by the Mechanical Division.

The new specs supercede or alter all those previously issued by the AAR and cover many facets never before subject to rigorous standards.

Produced through the year-long, full-time efforts of three railroad mechanical engineers who received the full cooperation of car builders and car-component manufacturers, the "Fundamentals of Freight Car Design" would take into consideration the longer, high, heavier capacity, and more sophisticated cars being designed and built today.

The 250-page specification, which establishes maximum allowable stresses and minimum design criteria, would make no effort to fix car configuration, and would aim only to insure trouble-free, safe, operation of rolling stock.

Design fundamentals, if approved, would be mandatory for all new cars and would be recommended strongly for cars undergoing major rebuilding.

● **Emphasis on change.** Throughout the meetings, emphasis was on change and on the research and development work that has changed and is changing the nature of railroad operations.

AAR Vice President Keller set the tone in talking to members of the Chicago Transportation Club. Evidence of the boom in R&D was all around his audience, in the McCormick Place exhibit hall and at the track exhibit nearby. So he concentrated his attention on what's happening in railroad research.

He talked mainly of computers, and the functions they can perform—under proper programming. And, though he saw computers as being in their infancy now, he forecast areas in which they'll be working hard tomorrow.

Related to the computer field, he continued, is automatic car identification—an area in which studies have been underway for several years at the research center and on a number of railroads.

Several prototype designs are now available, Mr. Keller told the Chicago group.

"We expect to begin field studies with some of these devices to determine just how well they perform and how free they will be from failure."

Accuracy, he emphasized, will be essential—as will freedom from failure or breakdown: "We have set one error in 250,000 readings as the maximum permissible—and, since there are up to nine characters in the car reporting marks, this means only one error in the reading of 2,250,000 individual character readings.

"A few designers have expressed some concern about the severity of this specification—but in view of the specification drawn up by the Computer Usage Company for the Los Angeles County Sheriff's Department in which 100% accuracy is required for five million records, we don't think our requirement is too restrictive. To produce accuracy, however, any system must be equipped with back checks which computer people call 'redundancy.' The addition of redundancy in a system can increase cost, and this we must avoid."

● **Performance measures improvements.** Mr. Keller also touched on the elements of progress in railroading which his audience could see—locomotives, freight and passenger cars track maintenance equipment and track structure itself, signaling and communications devices. But, he added quickly, improvements in rail operations can't be seen just by looking at new equipment. Rather, they have to be related to such indicators of performance as net ton-miles per loaded car-mile (32.1 in 1953, 35.7 in 1962) and gross to miles per freight train (51,750 in 1953, 67,544 last year).

Visitors examine signaling equipment at an exhibit at McCormick Place.

Signaling technology sets pace

Communications devices are also changing rapidly, show exhibits and meetings proved.

Technological improvements are coming to few departments as rapidly as they're coming to signal and communications operations—and S&C officers face sizeable challenges in making the best use at lowest cost of the devices now available and those that will be developed in the years ahead.

ARPE exhibits—in such areas as traffic control, automatic car identification, radio communications, microwave and crossing protection—gave strong indication of the opportunity, and comments at the AAR Communications & Signal Section meetings proved it.

● **Joint use of facilities.** SP Signal Engineer H. B. Garrett, for example, hit hard at both the efficiency and economy angles in talking to the section. Among his points: Many roads are not making maximum use of joint

facilities (or facilities which could and should be joint) between signal and communications departments; many roads are maintaining two pole lines where only one may be required.

Mr. Garrett also urged C&S officers to get moving on standardization—with action, not merely talk. It makes no sense, he declared, "for each communication or signal engineer to insist that he be furnished with something just a little bit different from that purchased by his neighbor, when both items of material or apparatus could perform the same function or provide the same protection. Why not give the manufacturer a break and let him make 50 units of one item, instead of 20 pieces of equipment assigned to a certain piece number and 30 of another of entirely different piece number. Each may require individual design drawings, special handling in the assembly-line operations, shipping, invoicing and so forth—all of which can only result in higher cost to the railroad."

● **Automation stressed.** Much of the C&S Section's attention during its annual meeting was also focused on the rapid development of automated railroad operations and on the growing applications of solid-state coding systems.

J. Donald Hughson, of General Railway Signal, outlined the method of operation of the Iron Ore Co. of Canada train automation in ore hauling; Walter E. Noller, president of Noller Control Systems, described advances made in transistorized coding systems; John D. Frayne, of Marquardt Corp., told of a new grade-crossing protection system developed by SP and the Stanford Research Institute.

The Canadian ore-train operation, Mr. Hughson explained, provides for operation of four 18-car trains from two loading pockets to a crusher six miles away, dumping of the cars and their return to the loading area. Tracks from the loading pockets combine into a short stretch of single track, followed by a passing siding long enough for non-stop meets. A 4-mile section of single track leads from the passing siding; a tail track and run-around are provided at the crusher. Trains are kept intact during the operation, he noted, with the locomotive pulling loads to the crusher and pushing them back to the loading point. The whole system operates automatically except for movement during loading, release after loading and movement of the train into the crusher to begin car spotting.

● **Solid-state device applications.** Mr. Noller described application of a typical solid-state system to an interlocking-control project—and went on to point out that "security and reliability are the vital requirements of any system used to transmit data or control information. Such a system must function correctly or not function at all. It must be able to monitor itself. Transmission channel failure, interference, noise or distortion must not produce erroneous results. Neither can the characteristics of the communication channel be permitted to introduce errors or changes in the information being transmitted."

Characteristic of solid-state devices, he pointed out, "are an inherent high operating speed and the ability to function without wear. In addition, their characteristics lend themselves to new approaches in mechanical construction. Since heat-producing filaments are not required, they can be treated mechanically in a manner similar to other components such as resistors and capacitors. Thus, a truly modular approach to construction is feasible."

● **Constant-warning time possible.** The new SP - Stanford - Marquardt crossing-protection system provides a constant warning time regardless of train speed and involves techniques for measuring the train's distance from the crossing as well as train speed, according to Mr. Frayne. Multiple insulated rail joints, he noted, are not needed: The grade-crossing system "treats the track as a shorted transmission line in which the short is provided by the train. From the value of the input impedance or reactance of such a line, it is possible in this system to determine the location of the train and to obtain a value of train speed from the time derivative of this quantity. With the determination of these parameters, the train's arrival time can be calculated at the crossing. With the time of arrival known, the system can start the warning signals at a time to provide the least possible delay for vehicular and pedestrian traffic." Thus far, Mr. Frayne said, about 100 installations have been made and "there is a record of complete safety to vehicular and pedestrian traffic . . . accomplished under widely varying conditions of ambient temperature and ballast conditions."

SPECIAL EXPOSITION REPORT

Buyers face a big year

Purchasing agents may have a busy 1964—and the supply industry a good one—based on indications that the railroads are going to spend more. The figure mentioned: $2.5 billion.

Railroad purchasing agents may be busier in 1964 than they've been in many a year—and so may the railway supply industry.

Reason: Railroads are going to buy more, spend more.

Chairman Frank J. Steinberger of the AAR's Purchases & Stores Division pegs the '64 spending total at $2.5 billion—$1.5 billion for materials and supplies and $1 for capital expenditures. By contrast, the industry's total outlay in 1962 was only a little more than $2 billion—and, though railroads will spend more this year, the $2.5-billion estimate for '64 represents still another substantial increase in buying.

Mr. Steinberger's forecast was built on a number of indicators—the prospect of increased business for the railroads, an improving atmosphere for constructive transportation leglislation in Washington, predictions of another 7-million-car year in the automobile industry, the likelihood of management-labor peace in many key industries. He termed 1963 an above-average year—but, he told the P&S Division membership, "for 1964, the picture looks even better."

● **P&S looks ahead.** Like the other AAR groups and the many independent organizations meeting during ARPE week, the P&S Division spent most of its time looking ahead—and one of Mr. Steinberger's main points involved the firming up of broad support for the railroads in the legislative arena. Earlier, the division's general committee had proposed formation of a national supplier organization aimed at solidifying such backing. In his comments to the P&S delegates in Chicago, Mr. Steinberger noted that "another way to do this would be for each supply organization to authorize the Railway Progress Institute to speak for" the industry—a move RPI and a number of other supplier groups have been studying.

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The P&S Division chairman made it clear that it's the end result, not

the method, that is paramount: "We have no quarrel with the manner in which this governing body should be set up. We merely point to its need and suggest a remedy. . . . All we are asking is that the supply industry so organize that they can present a solid front in all national matters pertaining to the railroad industry."

In the area of actual purchasing and stores operations, Mr. Steinberger told the group that the industry can be "justly proud" of the strides it has made in materials management—and reports from several P&S committees added weight to the claim.

The committee on warehousing, for example, cited studies of stores operations and came to the conclusion that "considerable sums of money [are] tied up in inventory by many roads for identical items in the same vicinity." Progress toward consolidation could be made, the committee indicated—but there's yet no unanimity of agreement on how the total problem can be solved. Some roads, Chairman H. C. Miller (IC) indicated, say they would not be interested in a joint stock-protection plan.

● **Six-pack or barrel?** Another P&S report highlighted the membership's thinking on the buy-big, buy-small situation—and found a conviction that the "six-pack" is better than the barrel, especially in such purchases as oils and greases for redistribution to outlying points. The division's committee on standard packaging, headed by R. H. Cobb (C&O) found a definite trend toward buying in small containers, rather than purchasing in bulk and repackaging for shipment.

Committee reports centered on the P&S departments' functions in day-to-day operations; J. H. Bean, executive vice chairman of the division, dwelt on P&S responsibilities under the emergency conditions that would be created in the event the country is involved in a shooting war. The heart of his comments: If bombs fall, when attack is over it will be up to the stores departments to re-open the supply lines that will put the railroads back in operation.

Mr. Bean told P&S men that the division is working with the Department of Commerce and the ICC to develop a disaster-recovery plan—and that plans are being drawn up to determine what maintenance material must be stockpiled.

Other reports to the division's 36th annual meeting involved a wide range of subjects, including training, inventory control, unit loads, application of materials-handling techniques, materials simplification and standardization, fuel and lubricants, cross ties, scrap reclamation and scrap disposition.

RPI and NASAB also held meetings

Golden Freight Car awarded to Southern; shippers hear Loomis.

Railroad meetings loaded up the agenda at the ARPE these last two weeks—but there were other folks around, too, and their sessions provided two of the highlights of the eight-day Exposition.

First off came the annual meeting of the Railway Progress Institute and the annual RPI dinner—an event where speech-making is at a minimum and socializing at a maximum. As in years past, the main order of business at the Chicago dinner was the awarding of RPI's Golden Freight Car for excellence in freight traffic promotion. This year, the award went to Southern, for a hard-hitting presentation titled simply —and aptly—"Big John and the Grain Rates." Right behind Southern, with awards of merit, were Baltimore & Ohio, New York Central, Norfolk & Western, Santa Fe and Western Pacific.

● **Shipper board meeting.** During the second week of the ARPE, the shippers came to town—for the 27th annual meeting of the National Association of Shippers Advisory Boards. And they had before them a familiar figure: Daniel P. Loomis, president of the AAR.

Some four years ago, Mr. Loomis kicked off the industry's fight to modernize work rules in an address before the NASAB. Last week, he brought the record up to date—with the comment that the long dispute "now appears on the road to final solution."

Shippers, he said, "have witnessed history in the making on this issue, right up to the crisis week of late August when a strike seemed imminent and many of you did not know whether the railroads would be carrying your products the next day or not. Perhaps that was the most difficult moment of all in this long effort.

"If this 55-month record proves anything, it is that both the industry's internal and external problems are infinitely complex, with built-in drags against change, that it takes an infinite amount of willpower and patience to solve them. I can assure you that the new breed of railroaders you deal with every day have what it takes to break these barriers—and we intend to use it to the hilt."

● **Labor should find new "black beast."** AAR's president also called for a closing of ranks: "I can personally appreciate the vexing internal problems union leaders have to cope with. . . . But I do wish that if our labor counterparts must have a 'black beast,' they would lift their eyes beyond the other side of the bargaining table. Beyond, they would see road, air and water carriers grown huge and powerful from the rail traffic which, with government's help, our competitors have grown fat on for many years. Beyond, they would see lop-sided and inequitable public transportaton policies which punish the rail industry and its job-providing capacity, and which cry for correction. Beyond, they would see all too many politicians who, neutralized and immobilized by the pressures of selfish interest groups, now bottleneck the road to just and needed changes in law."

Is there hope for new management-labor cooperation? Mr. Loomis believes so—and he cited three "significant straws in the wind": formation of the National Railway Labor Conference, which will "not merely react to periodic union demands but will do basic research and come up with ways to meet long-range employment problems; management-labor agreement on new legislation governing the industry's retirement and unemployment insurance system, and the recent switch from opposition to support by the Railway Labor Executives' Association on the Kennedy transportation bills.

AAR's top officer told shippers he's optimistic about the new frontiers of railroad technology opening up. But he had a sharp warning that maximum service can hardly be expected without a "turn-about by government toward policies of favoritism to none and equal treatment for all."

● **Raps increasing subsidies.** Mr. Loomis also rapped still-rising government spending programs for competing carriers. When, he asked, "are the road, water and air transport giants going to begin to pay their way."

Railroads, he said, "have been rocked by the construction with tax funds of thousands of miles of superhighways . . . half-drowned in the water of mammoth government inland navigation projects . . . dizzied by the droning around our heads of thousands of government-subsidized airplanes. We have been hobbled and restricted—and finally confronted with transport giants in many other fields."

Traffic jam in the Northwest passage

Seattle's hope—rapid transit?

Authorities are beginning to sift through reams of statistics collected in nearly three years of studying the area's transportation problems in an attempt to provide some answers. One possible solution is a rapid transit system to tie the region together.

Seattle, showcase of monorail rapid transit during last year's World's Fair, is looking for a cure for its own transportation ills. It seems doubtful that the prescription will be a monorail.

The Puget Sound Regional Transportation Study is now in the last year of a three-year survey of the Seattle area's transportation facilities and needs. Its job between now and June 1964, completion date for the study, is to evaluate a mountain of statistics obtained in the past two years and present some solutions. Along with suggestions about future highway, terminal facility and land-use development there may be a recommendation to establish a rapid transit system.

"It may not be feasible to provide any rapid transit for this area," John K. Mladinov, director of the study, has said. He is quick to point out, however, that "we are convinced we cannot do without public transportation. We will have more non-drivers in the future—both young and old."

● **Car-use high.** Mr. Mladinov's staff interviewed 105,000 motorists, residents of 34,000 households, 9,000 truck and taxi operators and 6,000 ferry passengers in the Puget Sound area and found that about four million individual trips are made within the area each day. Some 94% of these trips are by private automobile.

Despite this high automobile usage by residents, the 1960 Seattle census showed that of almost a million people sixteen and older in the area, nearly 233,000 were not licensed drivers.

"We cannot forget the non-drivers, those people who are either too young or too old to drive private cars," Mr. Mladinov continued. "The aim of our transit analysis is to develop reliable procedures for estimating future transit patronage which reflect the effect of possible changes and improvements in the transit system as well as changes in the region's land development pattern. Obviously, if a change is made in the transit system, patronage will be affected. Likewise, improvements in the street and highway system will also affect transit use."

He said any recommendations for expanded public transportation, whether or not they include a rapid transit system, would be coordinated with present facilities, explaining "it would be unfair to go into rapid transit without integrating it with existing service." He envisioned a future rapid transit system utilizing existing bus lines, railroads and highways as feeder lines into the system.

The Seattle area is an anomaly among major metropolitan areas in the amount of ferry service necessary to tie it together. Access to Seattle from Vashon Island, one of the major residential communities, and Bremerton, smallest of the four cities in the area, is only by ferry or lengthy automobile trip skirting Puget Sound. This geography alone would slow any proposed rapid transit service or make it almost prohibitively costly. It is doubtful this area could afford either a bridge over, or tunnel under, Puget Sound to speed commuting.

● **Publicly-owned lines.** Seattle has little privately-owned public transportation. There is virtually no railroad commuting service, and only a small portion of the city is served by private bus lines. Almost all available public transportation, including the extensive ferry lines in the metropolitan area, is city or state owned.

Only recently—with the extension of municipal bus service into Seattle's northend — has public transportation run competition with private facilities. Unless private lines expand more rapidly than there is reason to expect, Mr. Mladinov does not foresee rapid or any other form of publicly-owned transit taking business from private companies.

Another peculiar feature of the Puget Sound area is that while Seattle is, and probably will remain, the "Queen City," within 30 miles are two more of the state's five most populous cities. These, Tacoma and Everett, along with Bremerton, another of the state's major cities, and their counties of Pierce, Snohomish and Kitsap, respectively, are participating with Seattle and King County in this study. These four counties comprise 53% of the state's population. In addition, Olympia, the state capital and another of the five largest cities, lies at the base of Puget

Sound only 30 miles south of Tacoma. Although not participating in the study, Olympia is interested in, and has an effect upon, what the other cities do.

Each of these cities has a separate entity and economy and cannot be considered a suburb of Seattle. Within the 30-mile-area north and south of Seattle, many Seattle workers live alongside people who work in either Everett or Tacoma. Transportation is a two-way street in this region.

● **Future transit possibilities.** While Seattle would undoubtedly be the first to have any rapid transit, Tacoma and Everett would not be far behind. Any system for Seattle would have to be built with an eye to the future so it could be tied into lines serving Tacoma and Everett.

Such a system would be about the same length as that proposed for the San Francisco Bay area, a far more populous and wealthy region than Puget Sound. Pointing out that the Bay area's $792 million project will be met about 85% from property tax and 10% from tolls—the former a source Seattle does not have—Mr. Mladinov wonders if Seattle could raise $100 million on a property valuation of about $1 billion. And, further, if this sum would be enough to build the first 35-mile stretch to service Seattle alone.

Whatever it can raise, Mr. Mladinov doubts that Seattle could afford, or would want, monorail rapid transit such as now whisks over 1.2 miles of its downtown heart. That $4.2 million stretch of rail was built by Alweg as a practical salesroom to show many cities, Seattle included, monorail transit in reality.

Alweg has recouped its investment by carrying about 800,000 passengers to the World's Fair grounds, now converted to a civic center. It's still running, but for how long is questionable.

The city of Seattle has voted not to acquire the system and the Alweg franchise expires Oct. 21, the one-year anniversary of the World's Fair closing. The Century 21 Corporation which staged the Fair and is now operating the remaining facilities on the fairground has an option to take over the system at no cost after that date or order Alweg to tear it down for $200,000.

"The Monorail is a tourist attraction and has been little help in our study," Mr. Mladinov said. "The people that ride it, ride it like they take a trip to the top of the Space Needle (another remnant of the Fair)—for curiosity's sake. Whether they would ride a similar system to work every day is doubtful."

But the biggest strike against a monorail system, Mr. Mladinov said, is its cost. "There seems to be little difference between elevated, surface and subway lines in their appeal to users," he explained, "and if we decided on an elevated line there would be little price difference between conventional and monorail.

"However, I feel business interests in downtown Seattle would almost certainly oppose elevated lines, so they would have to go underground before entering the heart of the city. That's where monorail would become too expensive," he continued.

● **Scattered land development.** Another problem for Seattle transit is that because land is still relatively plentiful and inexpensive, development has followed what the planning experts call a "leap-frog pattern." Land which is less expensive to build on, or more attractive land with views of Puget Sound or the two mountain ranges that fringe it, has been developed first leaving pockets of low population in the region. This means transit lines must cross areas of little patronage to get to the customers. Seattle would have to have more trackage and more frequent schedules to serve fewer people than more densely populated areas.

"Beside converting the automobile-oriented public of this area into transit users, we might have to completely re-educate their living habits to get rapid transit customers," Mr. Mladinov said. "Many already object to what little zoning we have and it is almost certain there will be opposition to the large amount of zoning restrictions necessary to ensure a more orderly land-use development."

Big selling job ahead

Mr. Mladinov and his staff plan to weigh all these "ifs" against the statistics they have compiled and by next Spring come up with an answer to whether Puget Sound needs—or will need by 1985—rapid transit, and whether it is financially feasible. Then, Mr. Mladinov realizes, comes one of the biggest tasks. These recommendations have to be sold to the citizens and elected officials of the cities and counties involved.

If the recommendation is for rapid transit, then some group other than the Regional Transportation Study will have to take the ball. At present there is no group in Seattle or within the four-county region which has authority to undertake such an extensive and expensive project.

The Puget Sound Governmental Conference, parent group for the study, will receive the report first and act upon it. But even if it approves the recommendations this does not mean they will automatically be implemented. John Porter of the Conference staff explained that although the individual counties and cities have never gone against the recommendations voted upon by their representatives in the Conference, there is always a first time. "The Conference members represent only a portion of the city councils and county boards of commissioners involved," he said.

It is almost certain, too, that action by the State Legislature or possibly even a state-wide popular vote would be necessary to establish rapid transit. Everyone concerned with the transportation study feels that a single group should be empowered to finance, build and operate rapid transit. No one but the Legislature—and perhaps not even it without a vote of the people—can create a group to handle financing.

● **Eyes on Washington.** The transportation study staff is hoping, like many other groups involved with transit across the nation, that a bill providing federal aid for transit will be passed by Congress. "It would make our job a lot easier," commented Mr. Mladinov. "It's difficult to convince elected officials and private citizens to raise the vast sums needed for rapid transit, but if they knew federal aid would pay part of the bill they would probably be more likely to approve it.

"For example," he continued, "our study might show that we didn't need rapid transit now or even in the next five years, but by 1975 we would. The logical move would be to begin acquiring rights of way now, but I wonder if people would be willing to spend money now for something they won't see for 10 years."

The State Highway Commission, which is paying the lion's share of the $1.6 million bill for the transportation study, is eagerly awaiting the report because it could affect many of their projects. In January 1965, plans will be drawn by the state for a third bridge across Lake Washington linking Seattle with its eastern suburbs. By that date the Highway Department wants to know what special rapid transit facilities should be included in the bridge plans.

With the State Legislature also convening its next biennial session in January 1965, that month is expected to begin a critical period that will affect the future of Puget Sound rapid transit. By then, the studies will have to be completed, the questions answered, recommendations made and public interest aroused. It will be time to start making a reality out of what has previously been speculation.

A Pennsylvania success; a California forecast

Philadelphia riding high

Philadelphia's Passenger Service Improvement Corp. has tallied up its passenger figures for 1962 and found that it carried more than six million people on its six bargain-fare commuter lines.

The passenger total is up 42% over the number riding the Pennsylvania and Reading lines in the years immediately preceding inauguration of city-sponsorship of the lines. It is the second consecutive year the lines carried more than six million passengers.

PSIC is now expanding station parking facilities, electrifying the Reading's Fox Chase line, improving scheduling and using new air-conditioned "Silverliners" to attract even more customers.

Comments Casimir A. Sienkiewicz, PSIC's chairman: "We are pleased that this initial part of the program has been so successful. It gives us great hope for the future of the Greater Philadelphia area."

Good outlook for transit

Stanford Research Institute, an independent research organization that specializes, among other things, in long-range planning, has taken a telescopic look at the future of rapid transit. What it sees ahead is a galaxy of transit pluses that should put stars in the eyes of the industry.

In a capsule report from a study it made, the Menlo Park, Calif. group finds that "population growth, continued traffic congestion, and the apparent inability of the automobile to solve metropolitan transportation problems now, or in the future, are focusing new attention on rapid transit." In the future, it says:

- About $10 billion will be spent for rapid transit equipment and construction over the next two decades in about 20 major metropolitan areas.
- Urban freeway spending will continue at high levels—about $30 billion between now and 1980—but rapid transit projects will provide the greater change in future mass transit.
- Advanced versions of conventional rail systems—subways, elevated trains, and the like—will account for about 80% of rapid transit spending; buses or other rubber-tired vehicles operating on exclusive roadways will be used for a few systems.
- Demand for rapid transit vehicles will peak at about 2,000 vehicles in the late 1970s; it is now 400 per year.
- Most of the newer rail rapid transit systems will rely on automatic controls, faster moving vehicles, and extended routing to lure motorists from their automobiles.

A top-priority item as SRI sees it: "Most needed is an economical system for moving large numbers of people short distances—from transit terminals to office buildings, for example, in both downtown and suburban areas."

The first of the new cars for the New York World's Fair line.

New World's Fair cars

Part of the New York City Transit Authority's contribution to the 1964-65 World's Fair—new "Festival Blue and Gray" rapid transit cars—recently made an inaugural run on the Flushing-IRT line from Times Square to the fair grounds in the Flushing meadows.

The Transit Authority has ordered 430 of the cars, at a cost of $51 million from St. Louis Car Division of General Steel Industries. By opening day of the fair next April 22, a number of the new 11-car trains will be operating on the World's Fair line.

The new cars have panoramic windows to give visitors a good view of central Manhattan and the grounds from the IRT-Flushing line's elevated right of way.

Transit officials predict that during the two-year run of the fair half of the 80 million visitors will ride these trains for the 20-minute, 15-cent trip.

Transit bill bogged down

The chief sponsor of the $500 million urban mass transit bill is pretty gloomy about chances of the measure passing the House this year.

Sen. Harrison A. Williams, Jr. (D-N.J.) said that if the traveling public vocally demands it, it can get the Senate-passed legislation through Congress.

"If every commuter whose train has broken down, and if every bus rider who has waited 20 to 30 minutes for the bus to come by, had written their Congressman, we would have had the legislation passed by now," he said.

Large equipment orders

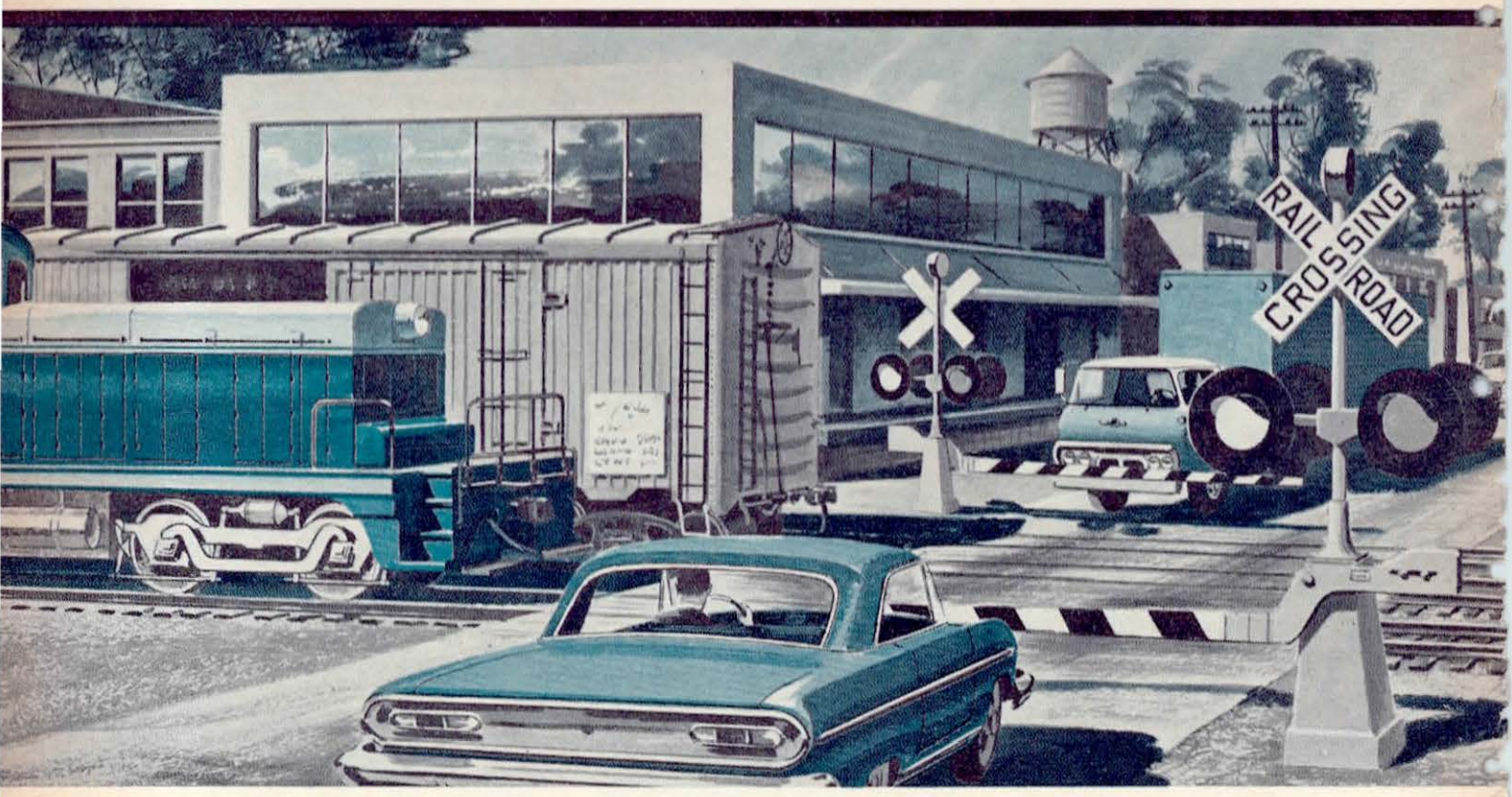
Two large orders for components for transit cars being built for transit authorities in two of the nation's largest cities—New York and Chicago—have been placed with manufacturers.

An order for 600 sets of car brake and automatic coupler equipment for new subway cars to be built by the Budd Co. for the New York City Transit Authority has been placed with the Westinghouse Air Brake Division of Westinghouse Air Brake Co. The $6.5 million order is the largest ever received by this division for rapid transit equipment.

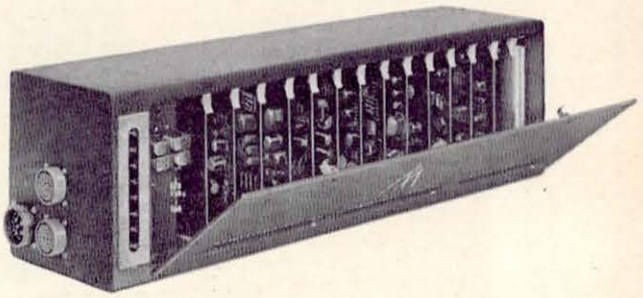
Rockwell Manufacturing Co. will design and manufacture 360 trucks to be used on 180 transit cars the Chicago Transit Authority has ordered from Pullman-Standard. The trucks will be built by Rockwell's LFM-Atchison Division.

Two MARQUARDT Electronic

1. GCP FOR HIGH TRAFFIC CROSSINGS



Marquardt's Grade Crossing Predictor is designed for installation at grade crossings used often by slow and fast trains and where there are switching operations. More than 100 GCP systems are now in operation. Recent packaging improvements enhance ease of maintenance and contribute to more efficient operation. The GCP operates crossing warning devices at a predetermined time prior to the arrival of the train regardless of train speed. Should a train halt before reaching the crossing, GCP stops the crossing signals and traffic is allowed to proceed, until the train's movement indicates it intends to pass through the crossing. Heart of this unique system is a fully solid state analog controller that continuously monitors speed and distance of approaching trains.



Grade Crossing Predictor with side open to show modular construction and easily removable printed circuit boards.

GCP FEATURES

Grade Crossing Predictor can be installed and maintained at a lower cost than present devices. Requires no timing circuits and only two insulated joints. □ May be used with either internal miniature relays or external conventional relays. □ GCP operates over all environmental ranges. It is fully transistorized and uses printed circuit boards. □ An automatic fail-safe system is built into the controller. □ Grade Crossing Predictor continuously monitors its own performance every five seconds.

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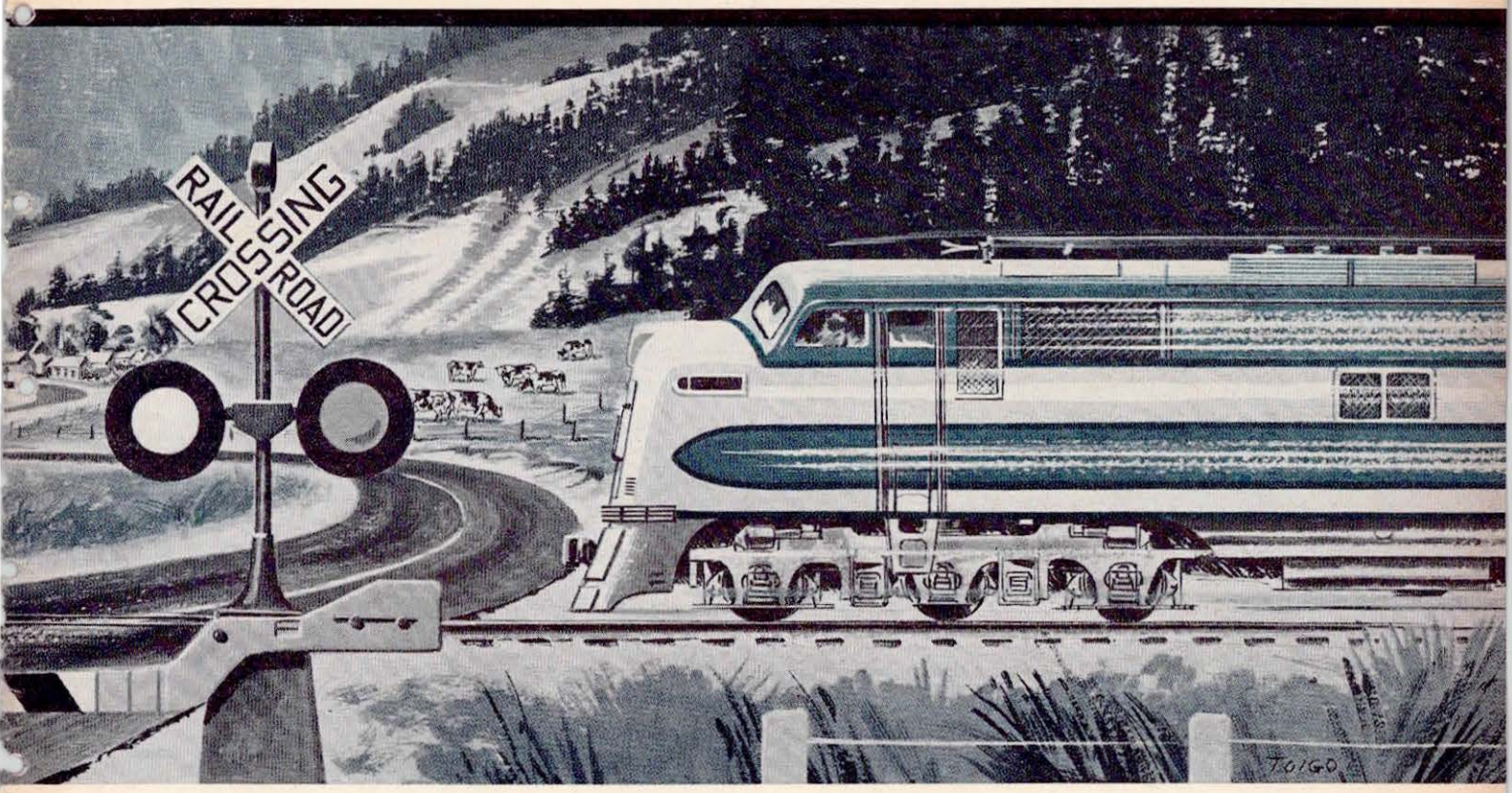
Systems for Railway Operations

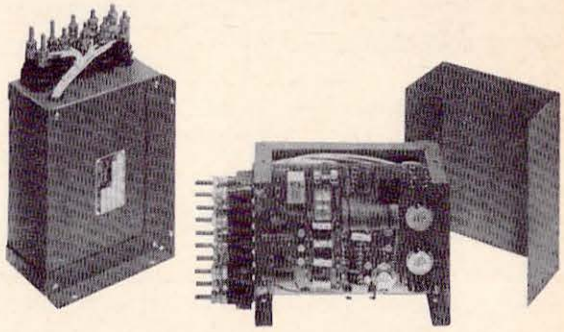
2. E-T-C FOR LOW TRAFFIC CROSSINGS



The Electronic-Track-Circuit, newest unit in Marquardt's electronic systems product line, is now undergoing field testing. The E-T-C is being produced for signal actuation at low traffic grade crossings. It provides a pre-selected warning distance from 500 to 5,000 feet. The unit is designed to operate under low ballast conditions (2 ohms per thousand feet which cause a distance extension of 200 feet at 4,000 feet). Electronic-Track-Circuit is a completely solid state system consisting of a transmitter, receiver, and three narrow-band shunts. Two shunts are located at the approach distances, one in each direction. The rest of the system is located at the crossing. E-T-C eliminates all insulated joints and the built-in island circuit is electronically adjusted.

E-T-C FEATURES

FAIL-SAFE □ Electronic-Track-Circuit systems may be used with either internal miniature relays or external conventional railroad relays. □ Direction and distance information is provided to the crossing by line wire from the approach distance. Primary power is required only at the crossing housing. □ Each system has a sharp bandpass filter for eliminating other signals on the track. □ Lightning protection is designed into the system in conjunction with standard railroad equalizers.



Electronic-Track-Circuit system with cover plate removed to show all transistorized components in accessible housing.

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WATCHING WASHINGTON WITH WALTER TAFT

TAFT

• **THE NEW CLASSIFICATION CODE** finally adopted by the ICC to become effective for reporting periods beginning Jan. 1, 1964, will be like the Commodity Classification for Transportation Statistics which was developed by the Bureau of the Budget for this year's census of transportation. This will make it compatible, too, with the Standard Transportation Commodity Code developed by the AAR for use within the railroad industry. The Commission has thus heeded protests against adoption of its own proposed Standard Commodity Code. The protestants, including the AAR and National Industrial Traffic League, challenged the Commission's claim that its proposed code would be compatible with the other two, which are already in use. The substitution of the Budget Bureau's code was made by a Commission order in No. 34206, the rule-making proceeding instituted last January to serve the proposed new classification on railroads, motor carriers and water carriers.

THE BUDGET BUREAU'S CODE is a five-digit code. That means that commodity statistics can be compiled from its cards in varying detail, depending upon whether cards for two-, three-, four-, or five-digit classes are run through data-processing machines. While STCC is a seven-digit code to provide detailed statistics needed by railroad management, its one-to-five-digit classes are the same as those in the Budget Bureau's code.

THE ICC ORDER will require reporting under 410 commodity classes of the Budget Bureau's code. These are all classes at the three-digit level, and some of the four- and five-digit levels. To cover commodities not provided for in the Budget Bureau's code, the Commission has set up a few additional classes. Its new code will replace the 262-class commodity classification which has been in effect since 1947.

• **ANOTHER WIN,** of one round at least, was scored by the railroads when the Commission instituted a rule-making proceeding to reappraise its reporting requirements for commodity statistics, and its policy as to disclosure of the figures reported by individual carriers. That new proceeding is No. 34315, rounded out by a reopening of Ex Parte No. 205. The latter is the case in which the Commission prescribed present reporting requirements for motor carrier freight commodity statistics.

THOSE REQUIREMENTS call only for quarterly reports, and figures for individual truckers are not made public by the Commission. Class I railroads, however, are required to file both quarterly and annual reports, and figures reported by individual roads are made public. Figures reported by individual water carriers are also made public, but water carriers make only annual reports.

THIS UNEQUAL REGULATION was assailed by the AAR in a petition which asked the Commission to make "uniformity and equality of disclosure" the "first and most important objective" of any new commodity classification. Institution of No. 34315 is the Commission's answer. The inquiry will determine whether the trucker reports should be made public or the railroad and water-carrier reports withheld from public files; and whether quarterly or annual reports, or both, shall be required from the reporting carriers. Presentations of interested parties are due December 2.

Transit achieving new status in cities

The ATA convention was told many authorities see transit as the key to city regeneration.

Potential museum material in the eyes of some skeptics only a few years ago, rapid transit is now getting priority in space-age cities. The men mapping the revitalization of the nation's major metropolitan areas are tying urban-renewal programs to mass transportation systems with low fares, good schedules—and equipment that no more resembles today's facilities than a car resembles a horse and buggy.

City planners, transit officers and equipment manufacturers described the new status of urban transportation—and its importance to the future of the big city—at the annual meeting of the American Transit Association in Chicago. Some of the things the transit men see on the horizon:

• Integrated city and regional transportation systems. Trains, buses and automobiles would all be used, each according to the service it can best provide.

• City responsibility for transit. Cities more and more are considering transit a service as vital to their survival as fire and police protection. They want transit systems that will be operated with efficiency and economy, but they also want them to meet the needs of the community.

• Government aid. ATA considers transit the responsibility of the federal government as well as city, county and state governments. They want help through subsidy, tax relief, demonstration grants and priority for transit vehicles on major streets and expressways.

• More comfortable and better looking transit cars.

• A warning signal. Transit men have been getting support from mayors, city planners and government agencies, but the need for transit has not been

recognized by the public—and some important programs have been stalled as a result.

● **You've got to have faith.** First on the transit bandwagon was Chicago Mayor Richard J. Daley, who pointed to a balanced transportation system as the key to regeneration of the big city. Mr. Daley swept aside disbelievers with the statement that "most of those who have little faith in the future of mass transit, also have little faith in the future of the city."

Mr. Daley showed a great deal of faith in both. "Like other cities," he said, "Chicago has a far-flung program of urban renewal."

The role of transportation in the future of the cities is essential, Mr. Daley told the ATA audience. "Any system that provides 7.5 billion rides in urban areas each year is contributing to the life-blood of our economic system and affects the welfare of every person, wherever he may live in the metropolitan area." For that reason, said the mayor, "mass transit—particularly rapid transit—is primarily a central-city problem."

The vast urban renewal programs, Mr. Daley stated, "should be keyed to gain the full benefit of our mass-transportation system. We must conduct our planning to build a transit city—not an expressway city."

Expressways, though, have a place in Mr. Daley's transit system. "Chicago's multi-lane Congress Expressway," he noted, "was the nation's first major highway project designed and built to coordinate rail rapid transit and automobile lanes in the same right-of-way."

● **Asks intermodal cooperation.** A balanced, coordinated transportation network, the ATA audience was told, includes expressways, major streets and mass transit. "It is time that all of the agencies of transportation join together in common purpose," Mr. Daley declared.

Revenue requirements for needed transit extensions and other capital improvements, Mr. Daley noted, are outstripping revenues from fares. "Consequently," he reasoned, "funds for making transit systems that will better serve the public must come from sources other than the fare-box."

● **Transit's new allies.** Both the mayor and retiring ATA President John C. Baine applauded the mass transit bill in Congress.

Because the need for transit systems is being recognized by public officials, Mr. Baine said, "we now stand on the threshold of a new era in mass transportation."

Interlocked with the transportation problems of the central city are the problems of the suburbs which supply the commuter. One method of total attack, Mr. Baine noted, is "the regional approach in transit—the concept of an area-wide, unified system integrating all the local companies into one facility." He cited Toronto, Miami and St. Louis as examples of cities that have regional systems.

Mr. Baine also pointed to a trend toward operation of transit systems by professional management groups under contract. This, he told the ATA, "is a means of bringing needed experience into the operation while offering some degree of insulation from political pressures."

● **San Francisco report.** When transit groups get together to talk about new developments in the field, the conversation eventually turns to San Francisco, which has begun construction of a billion-dollar regional rapid-transit system that will incorporate the latest technology. The system was made possible, said James R. McCarthy, director of planning for the city and county of San Francisco, "because we never believed or wanted to believe the prophets of doom (or Detroit) who have ventured that every Californian is born with an inseparable and inseverable automobile attached to his umbilical cord."

San Francisco's emphasis on public transit, Mr. McCarthy explained, has been geared to the desire to "maintain our downtown as the vital heart of our West Coast metropolis." The city fathers agree with Mayor Daley's statement that transit "cannot be placed in a profit-and-loss category." Its emphasis on transit "means public subsidy, a policy which has been supported as one of the cheapest means of maintaining the kind of downtown we have."

Subsidies enable the city to maintain fares at 15 cents. The deficit is paid with $6-7 million of ad valorem taxes.

● **'Transit streets' downtown.** The automobile also comes out second best on San Francisco's plan for downtown traffic: "We have designated certain streets as two-way transit streets, giving priority to transit. This results in convenience from an operating standpoint, but more important, convenience to the patrons of transit." Traffic signals on these streets, Mr. McCarthy pointed out, are timed for buses, and curbs are marked for them.

"Another policy adopted to keep the automobile in its place and transit in its rightful role," Mr. McCarthy told the ATA, pertains to parking. The city's zoning ordinance spells out off-street parking requirements for new construction "in every district except

(*Continued on page 28*)

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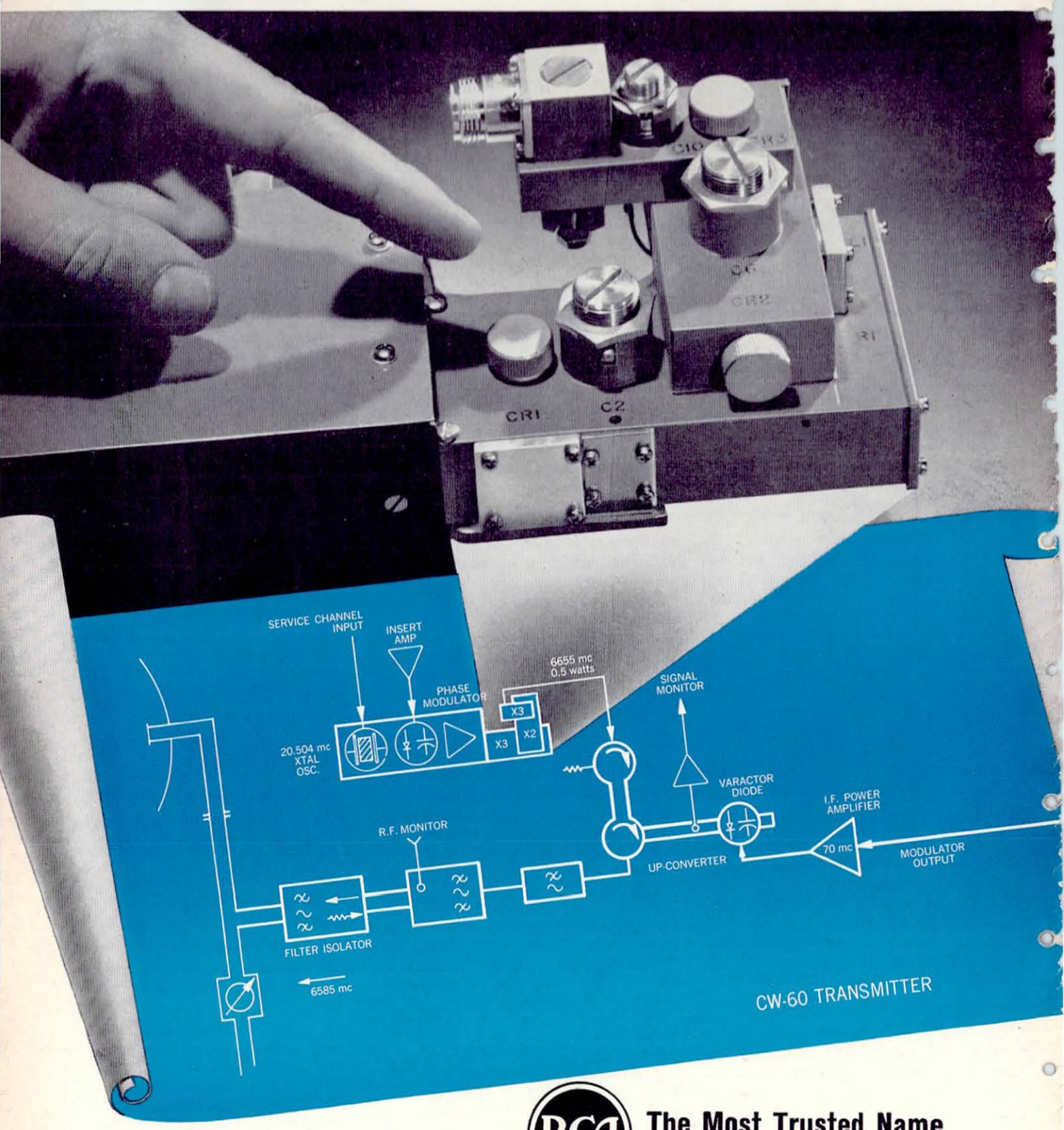

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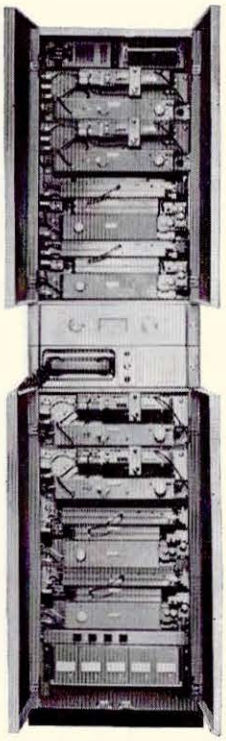

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Transit gains new status

(Continued from page 25)

the downtown district." The exception, he explained, is based on the recognition that two-thirds of the people in the downtown area got there by public transit. "We do not want a parking structure or lot between each office structure. We want to keep our crowded streets as free as possible for service vehicles and transit vehicles."

● **Storm warnings raised.** In the midst of the optimism at the ATA meeting, however, there was a note of caution. "Our efforts to correct the [transportation] problem, and to provide efficient urban transportation," warned James E. Lash, executive vice president of Action, Inc., National Council for Good Cities, "are in trouble, and may well be headed for more."

The mass-transit bill is stalled in Congress, he said, and only 145 out of 212 metropolitan areas have any kind of planning program. "Only a handful of these programs," he claimed, "can be described as comprehensive." The Highway Act of 1961 "established the principle that no federal assistance in any form of transportation would be forthcoming to any metropolitan area without a comprehensive transportation plan . . . approved and in use by 1965."

Mr. Baine agreed that transit is not yet out of the wilderness. He listed four major areas of concern for transit officials:

● **Federal aid program.** ATA should encourage and assist all field experiments and research groups in transit, he said, and added: "Many of our members are not satisfied with the federal-aid program in its present form."

● **Priority for transit vehicles.** "It is generally agreed," Mr. Baine said, "that speed is the key factor in making transit more attractive to both workers and shoppers. . . . Measures considered should include exclusive lanes on major arteries, reserve strips in expressways, loading stations and park-ride facilities on freeways, and even special transit streets during rush hours."

● **Stand-by charge.** ATA, Mr. Baine said, should promote a tax credit or tax support for transit service provided on non-paying lines or during non-profitable hours.

● **Downtown transit.** ATA, Mr. Baine said, should support the revitalization of downtown areas, and cities with central districts should recognize their increasing need of transit

EDWARD A. PELLISSIER, new president, American Transit Association.

The biggest problem, Mr. Baine stated, "is awakening our communities and convincing them that the large investments required for some forms of rapid transit is, in the long run, just sound economics. . . . The cost of financing rapid transit is formidable, but the cost of not doing it could be astronomical."

With the rebirth of interest in rapid transit has come a wealth of new concepts and design innovations. ATA members pointed toward some of the directions in which transit engineers are moving—and predicted that conventional rail rapid transit would be the basis of future systems.

Monorail is probably the most glamorous of the new rapid transit concepts, in the opinion of David Q. Gaul, executive director of the Institute for Rapid Transit. But, Mr. Gaul told the ATA audience, monorail supporters "have been unfair in comparing the cost of the monorail in its elevated form with that of the conventional rapid transit operating in a subway." Systems built in the future, he explained, will use a mixture of subway, elevated and surface operations, and while monorail might be less expensive for an elevated operation, "it is not cheaper, but definitely appears more expensive, when it operates through subways or on the surface." Economics, he predicted, would limit the use of monorail to "special applications where the elevated form can be accepted throughout the entire system."

Mr. Gaul also foresaw a limited role for buses operating over separated rights-of-way.

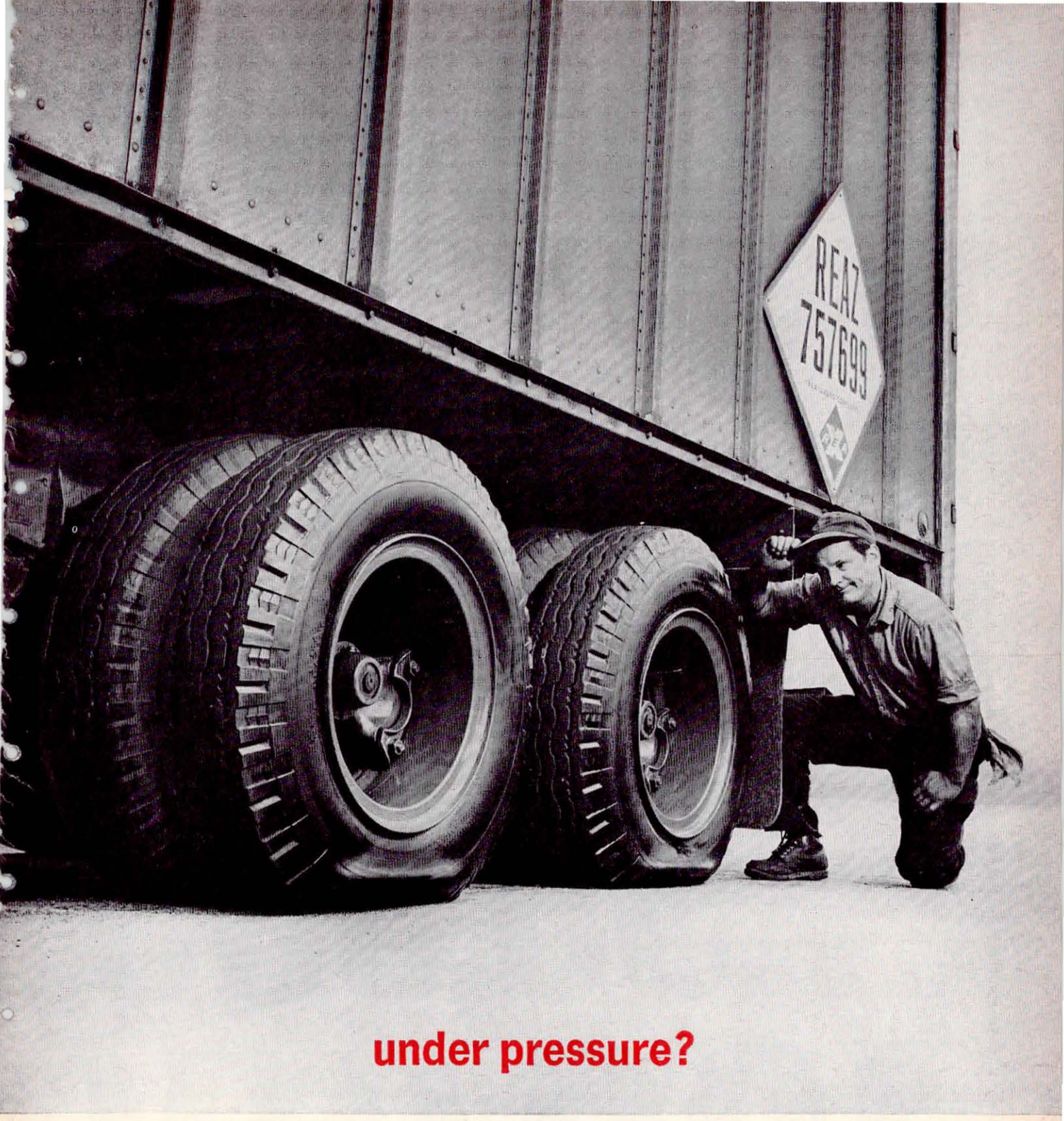
The steel-wheel, steel-rail principle will continue to dominate rapid transit, Mr. Gaul declared, "because of its ease of operation in trains, because of its compatibility with existing rapid-transit systems and railroad rights-of-way that might be available, because of its all-weather reliability, and because of tri-level adaptability."

The conventional mode, he pointed out, can be adapted to a wide range of design, and variation, by necessity, will be a characteristic of rapid-transit systems. "The variations in the clearance dimensions of existing systems," he pointed out, "preclude a standard-size vehicle. Furthermore, the variation in the required operating performance of a rapid transit vehicle is much broader than that of the motor bus operating on city streets. . . . For example, it is obvious that the requirements of a rapid-transit car for the Toronto system, which is a heavy urban operation averaging three stops per mile, is quite different than the requirements of an area-wide system such as that proposed for San Francisco with stops planned for approximately two miles apart. It would seem obvious that because of these variations in vehicle size and performance, standardization of equipment is not possible."

● **Competition for comfort.** Many of the design innovations are aimed at the comfort of the passenger. As the engineers of three carbuilders saw it, public officials are convinced of the need for rail rapid transit. Now the task is to convince the potential passengers. "We are not going to win these potential passengers to rail by default," declared N. W. Fesmire, Budd's manager of engineering. The job of the rapid-transit industry is "to compete with the comfort of the private automobile."

Although appearance and comfort will help lure the passenger to rapid transit, commented W. C. Wheeler, St. Louis Car's chief engineer, in the end it will be performance which will make him a regular customer. The objective is to "combine utility with appearance and secure equipment which would economically perform in any desired service."

Introduction of such materials as molded fiberglass is helping engineers achieve that objective, according to William Van Der Sluys, Pullman-Standard's general manager of passenger car engineering. Every carbuilder, said Mr. Van Der Sluys, "with the help of experienced industrial designers, has been presenting proposals and building cars that retain or improve upon all of the necessary utilitarian aspects, but at the same time are much more attractive to the general public as well as to the passengers."



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And there are many more advantages. For all the facts—plus actual figures on the basic economy of using REALCO trailers—write to Palmer Bayer, Vice President and General Manager, R E A Leasing Corporation, 219 East 42nd Street, New York 17, N. Y.

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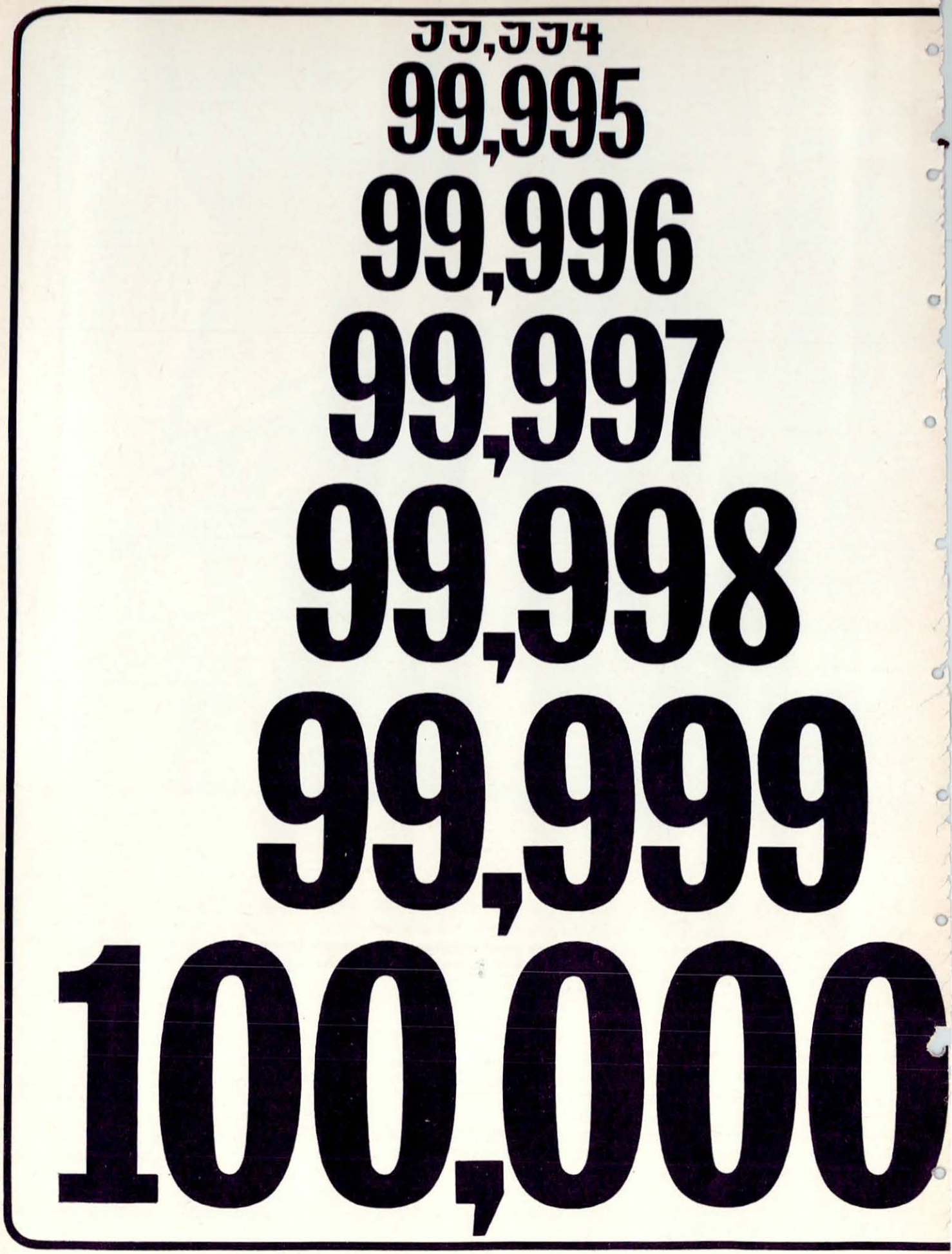
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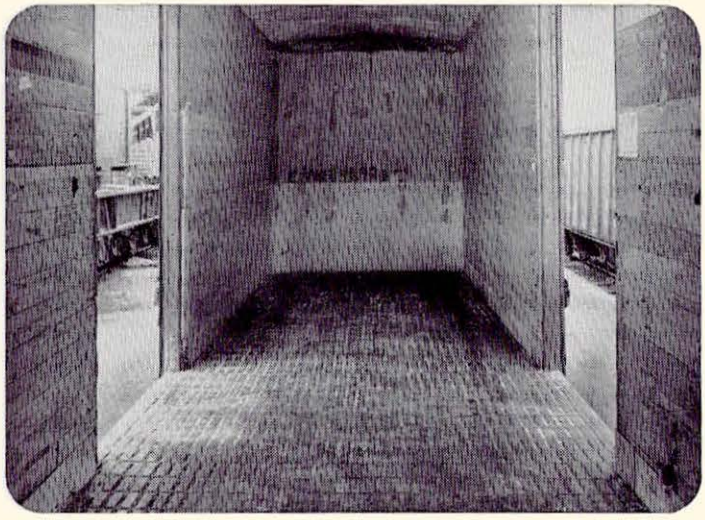
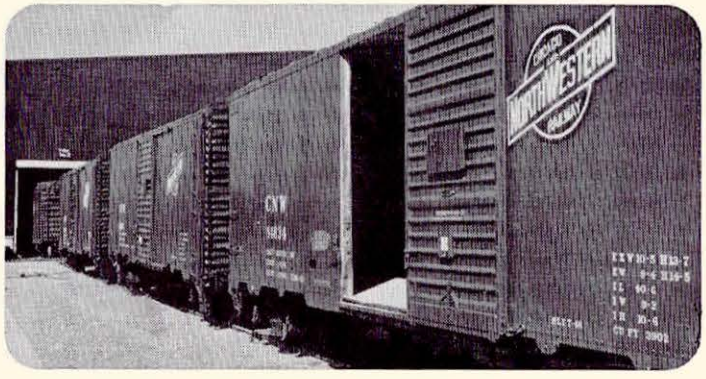
NATIONAL STEEL CORPORATION



IT ALL STARTED HERE. This is the first floor made of National Steel's Nailable Steel Flooring, as it looks today. Installed 15 years ago in C&NW 143698, it's the forerunner of all steel car floors. It is still in use, and has never needed repairs.



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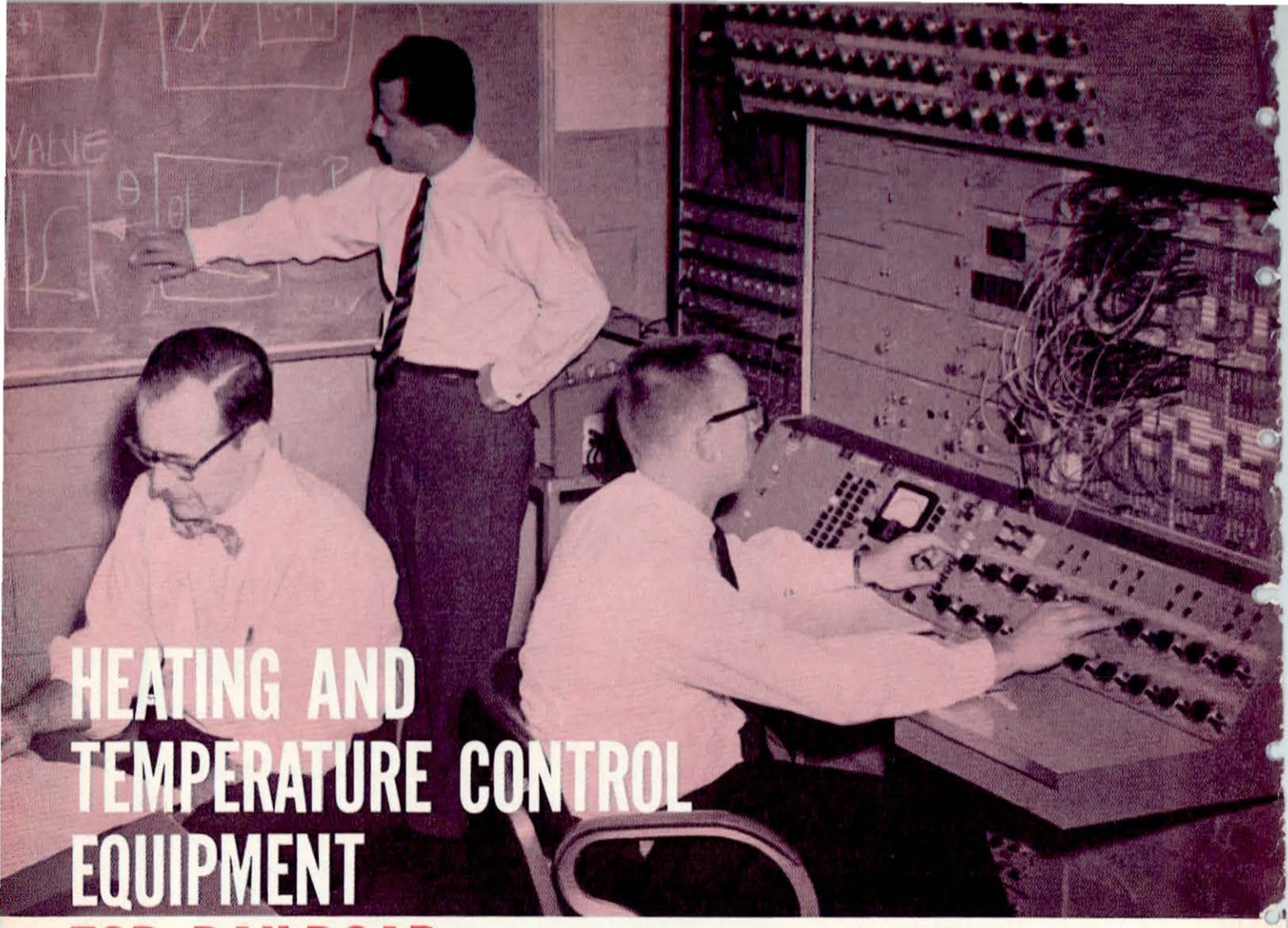

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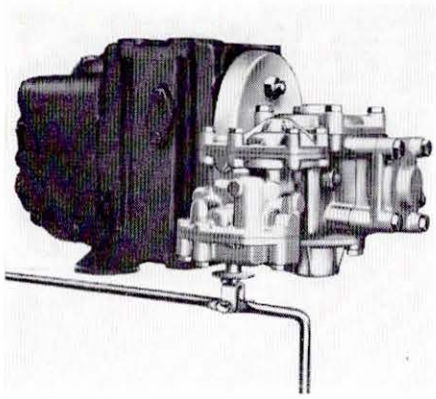
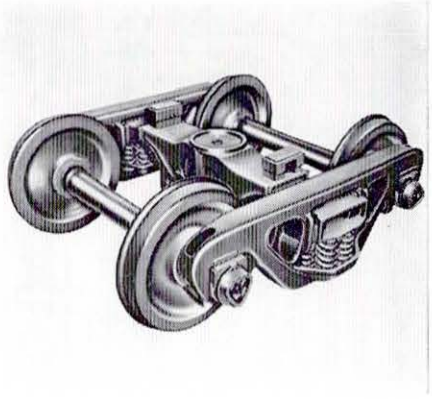
NEW PRODUCTS REPORT



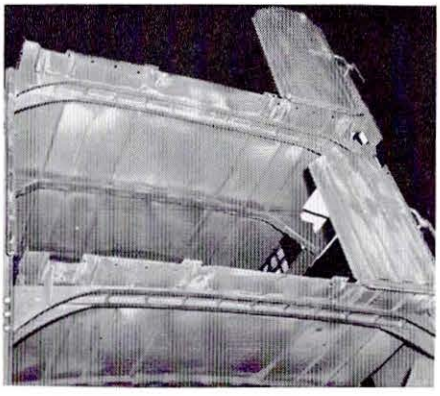
Brake Control Valve (RA-1)

The ABD-1 freight brake control valve functions similarly to the AB valve but with a diaphragm-operated-type service portion mounted on a standard AB pipe bracket along with the standard emergency portion. It functions as the standard portion, but at a higher level of flexibility and reliability. Temperature range continues at -50 to 200 deg F. Valves embodying these features are said to have been in use over six years on different properties. *Westinghouse Air Brake Co.*



Freight-Car Truck (RA-2)

Two bolsters and rubber pads control lateral motion on the Ridemaster truck. Vertical motion is controlled by Ride Control friction elements. Constant contact side bearings maintain steady control of truck movement and carbody stabilization at speeds up to 100 mph. On a test train, the number and intensity of lateral shocks inside a freight car are said to have been reduced ten times, compared with conventional trucks. *American Steel Foundries.*



Deck Support Casting (RA-3)

Cast-steel deck supports for the upper decks of automobile piggyback cars are said to produce a unit with greater strength and longer life under the heavier loads to which these structures are now being subjected. They are said to be an economical application for the longer rack cars now being built or rebuilt. Supports are designed for bolting to the vertical members, making changes in deck clearances possible. *Scullin Steel Co.*

Journal Bearing (RA-4)

The 100-ton Clevite cartridge journal bearing, of the same design as 70-ton model which has been used on high-mileage piggyback cars , can be adapted to an AAR standard 6½ x 12 roller-bearing type axle and applied to new or existing cars. When a 100-ton car is fully loaded, bearings are claimed to be loaded to only 25% of capacity. No specialized equipment, only simple hand tools, is said to be required for maintenance. *Clevite Corp.*

RAILWAY AGE WEEKLY

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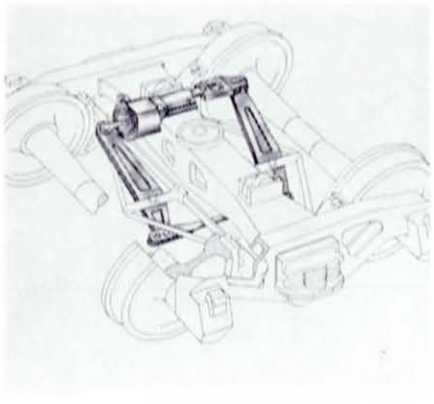
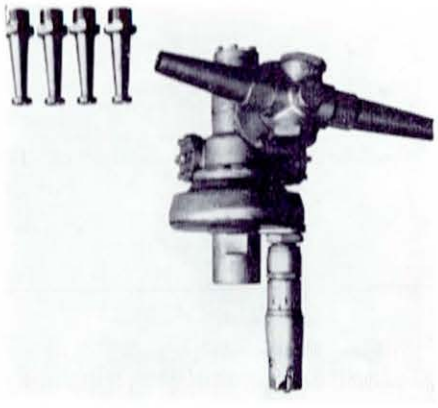
NEW PRODUCTS REPORT



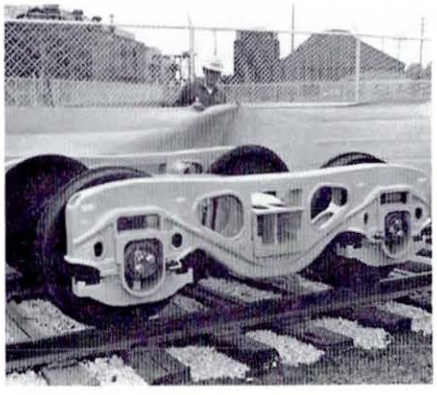
Package Brake (RA-5)

A package brake unit for freight-car trucks incorporates a single bolster-mounted pneumatic cylinder. It can be applied to practically any car now in service. Forces are delivered through a simplified leverage system to standard brake beams. Brake shoes of any material or friction level may be utilized with the unit. The cylinder is bolted to the bolster along with a manual or automatic slack adjuster. *American Brake Shoe Co.*



Tank Cleaning Unit (RA-6)

The Oakite 621 tank cleaning unit, designed to spray clean tank-car interiors, may be suspended in tanks by hose or piping. It is constructed of brass and stainless steel and is actuated by an air motor. The spray head makes one horizontal revolution every 15 min, and the nozzles rotate in a vertical plane at 20 to 30 rpm. The unit, which weighs about 30 lb, may be had with a choice of nozzles and a manhole cover, if desired. *Oakite Products, Inc.*



Freight-Car Truck (RA-7)

The 70-ton XL-70 high-speed freight-car truck of high-tensile steel accommodates increased loadings and higher speeds. Some of the basic features of it and the original 50-ton design introduced in 1947 are: separate journal boxes; load-carrying springs and friction snubbers at each side of journal box; constant frictional characteristics; independent side-frame equalization action to provide flexibility for track irregularities. *Symington-Wayne Corp.*

Dry Air Package (RA-8)

Air produced by Arid-Pac is said to be virtually free of moisture, dirt and oil vapors which block and corrode instrument control systems. The dryer works at a maximum pressure of 100 psi at capacities of 0.685, 1.3, 2.32, 4.6, 6.7 and 10.3 cfm. Atmospheric dew point of compressed air delivered is -12 deg F. No regeneration cycle, no periodic changing of chemicals, or chemical carryover endangers controls or process fluids. *Ingersoll-Rand Co.*

RAILWAY AGE WEEKLY

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10/21/63

Market Outlook

Carloadings up 0.6% above previous week's

Loadings of revenue freight in the week ended Oct. 12 totaled 635,596 cars, the Association of American Railroads announced on Oct. 17. This was an increase of 3,547 cars, or 0.6%, compared with the previous week; an increase of 28,715 cars, or 4.7%, compared with the corresponding week last year; and a decrease of 6,259 cars, or 1%, compared with the equivalent 1961 week. Ton-miles generated by carloadings in the week ended Oct. 12 are estimated at approximately 14 billion, an increase of 9.8% over the corresponding week of 1962, and 10.1% over 1961.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Oct. 12

District	1963	1962	1961
Eastern	86,579	82,309	87,823
Allegheny	98,918	91,642	105,121
Pocahontas	57,829	53,164	57,130
Southern	119,986	115,266	116,561
Northwestern	98,129	92,394	98,433
Central Western	131,407	129,779	133,498
Southwestern	42,748	42,327	43,589
Total Western Districts	272,284	264,500	275,520
Total All Roads	635,596	606,881	642,155
Commodities:			
Grain and grain products	64,714	57,198	61,834
Livestock	6,330	9,101	8,702
Coal	118,770	111,449	114,923
Coke	6,417	6,152	8,198
Forest Products	38,503	37,229	39,277
Ore	47,438	37,635	50,844
Merchandise l.c.l.	16,227	22,409	27,732
Miscellaneous	337,197	325,708	330,645
Oct. 12	635,596	606,881	642,155
Oct. 5	632,049	594,775	639,784
Sept. 28	620,139	596,852	637,294
Sept. 21	596,325	592,154	605,842
Sept. 14	596,056	586,626	596,029
Cumulative total, 41 weeks	22,785,157	22,772,492	22,366,34
Estimated Revenue, ton-miles (millions) 41 weeks	490,100	467,400	439,600

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Oct. 5 totaled 17,709 cars, compared with 15,212 for the corresponding 1962 week. Loadings for 1963 up to Oct. 5 totaled 610,317 cars, compared with 537,642 for the corresponding period of 1962.

IN CANADA.—Carloadings for the nine-day period ended Sept. 30 totaled 99,261 cars, compared with 79,908 for the previous seven-day period, according to the Dominion Bureau of Statistics.

Totals for Canada	Revenue Cars Loaded	Total Cars Rec'd from Connections
Sept. 30, 1963	99,261	30,412
Sept. 30, 1962	86,436	28,278
Cumulative Totals		
Sept. 30, 1963	2,653,186	859,711
Sept. 20, 1962	2,671,237	895,106

New Equipment

FREIGHT-TRAIN CARS

► *Atlantic Coast Line.*—Ordered 226 new roller-bearing equipped freight cars at a total cost of $3¾ million. Included are 186 70-ton cushioned underframe box cars from Pullman-Standard; 25 70-ton lumber cars from ACL's shops; and 15 Airslide covered hoppers from General American. Deliveries begin in December.

► *Norfolk & Western.*—Will build 1,500 95-ton hopper cars in its Roanoke shops, at a cost of over $15.5 million. The new type, known as Class H-11a, is a modified version of the 85-ton roller-bearing hopper previously built by the road. Production will begin about Dec. 1.

► *Union Pacific.*—Will order 2,000 freight cars of various types during 1964.

► *Wabash.*—Ordered 100, 4,000-cu-ft capacity centerflow covered hoppers from ACF at an estimated cost of $1.4 million for delivery by the end of 1963.

LOCOMOTIVES

► *Monon.*—Ordered nine 2,750-hp Century 628 diesel locomotives from Alco at a cost of $2.3 million for delivery early in 1964.

► *Union Pacific.*—Will order 55 5,000-hp diesel-electric locomotives in 1964.

► *Bad Order Ratio 0.9% Lower Than Last Year.*—Class I roads on Sept. 1 owned 1,528,313 freight cars, 44,440 less than on Sept. 1, 1962, according to AAR report summarized below. Bad Order Ratio was 0.9% lower than on Sept. 1, 1962.

	Sept. 1, 1963	Sept. 1, 1962	Change
Car ownership	1,528,313	1,572,753	—44,440
Waiting repairs	118,135	135,257	—17,122
Repair Ratio	7.7%	8.6%	— 0.9%

New Facilities

► *Southern Pacific.*—Ordered 4-channel-type CY yard cab signaling equipment from Union Switch & Signal division of WABCO for installation on three hump locomotives at Taylor yard in Los Angeles, Calif.

Purchases

► *Six Months' Purchases Up 3.7%.*—Purchases by domestic railroads of fuel, material and supplies in this year's first six months were $25,722,000, or 3.7%, higher than in the comparable 1962 period. Purchase estimates in the following tables were prepared by Railway Age.

PURCHASES*	June 1963	Six Months 1963	Six Months 1962
	(000)	(000)	(000)
Rail	$ 4,685	$ 25,436	$ 27,788
Crossties	3,484	21,707	17,264
Other Material	84,134	486,548	462,162
Fuel	29,239	180,802	181,557
Total	$121,542	$714,493	$688,771

*Subject to revision.

RAILROADING AFTER HOURS WITH JIM LYNE

LYNE

MANAGERS OR LEADERS?—A well-informed railroader held forth to me the other day on his conviction that there is a difference between able managers (in railroading as well as other industries) and those executives whom he'd consider to be "leaders."

He drew this distinction: The competent manager sees that each job is ably filled, that the property is well maintained, that quality of performance is held to a high standard, and that the operation is kept profitable, if at all possible. The leader (my friend believes) goes further. He runs a well-managed property but, beyond that, he plans and carries out courageous and even pioneering innovations in plant and service. These (if successful, as they often are) set examples that are emulated by others.

My guess would be that the two kinds of ability are, more often than not, to be found in the same person. In any event, isn't it such people in whose hands rests the future of the railroad industry (and of America itself)? The so-called "common man" is a valuable member of the community, but it is the "uncommon man" who accounts for most of the progress.

FIRST 'BRIDGE LINE'—UP General Attorney John Burchell cites me an 1888 ICC case (2 ICC 162) in which the following sentence appears:

"The Act . . . has in view traffic that has been taken up by one carrier and which at some point on its line is to be delivered to another."

The case involved a line in which an actual bridge was present, but the words above certainly indicate that what is meant is an intermediate carrier—a "bridge" between the originating and terminating lines. Mr. Burchell also cites an earlier case from England, but in that instance an actual physical bridge was prominently involved.

REMEDY AS YET UNTRIED?—On our Action Page, Sept. 23, we asked if anybody had the answer as to how needed railroad service that isn't paying its way could survive—till government gets around to equalizing conditions in transportation, so a necessary service can earn a living. We have an answer from a veteran railroad public relations practitioner, Hal Sims. His answer, in one word, was: "Prayer."

PLAYBOY SINGS THE BLUES—The publishers of Playboy Magazine have sent me a free copy (honest, I didn't buy it) of their October issue. The occasion was their publication of an article called "Lament for the High Iron." I started skimming through the pages, looking for the article—but my attention kept being diverted by pictures of one thing or another (*not* railroad pictures).

Well, anyhow, I finally found the article. It was friendly enough to the railroads—but the kind of friendship you have extended to you after you are dead. Because the author of the article sadly believes the railroads are dead—at least the only kind of railroading that interests him, viz., long-haul, steam-powered passenger trains. I saw only one mention of freight service, and the author evidently believes the trucks already have most, if not all, of that business—which he doesn't consider important, anyhow. He's not aware, apparently, of the huge Railway Progress Exposition in Chicago this month. He apparently hasn't heard of the upsurge in plans for railroad improvement in and around the cities—and perhaps for some new intercity service, between large population centers, such as the project being sponsored by Senator Pell.

THEY HAVE BEEN AROUND—E-L's Director of Purchases Curt Bayer calls attention to the multi-railroad career of his company's chairman, William White. He came up on the Erie, went to the Virginian, and thence to head the Lackawanna. Since then, he's been chief executive of the NYC, the D&H, and now the E-L.

The principal importance (as I see it) of noting the rather frequent multi-railroad backgrounds of some railroad leaders is the proof it affords that there's nothing whatever to the reputation that some people try to give the railroads—that all promotion is "by seniority." In the areas where union rules are not controlling, my observation is that advancement comes largely through merit—whether the man stays on one railroad, or works for several. Strict seniority rules, where they apply, make it very costly for an employee to shift his location.

Deadline Nov. 1 for radio rule

Railroads have until that date to adopt FCC band changes.

Most railroads will meet the Federal Communications Commision requirements for narrow band or split-channel radio operation to be effective by Nov. 1, 1963, a Railway Age survey reveals. FCC requirements are that all railroad radio sets operate on a 10 kilo-cycle bandwidth. Also included in the order are new frequency assignments which necessitated changes on several railroads. The narrower bands (10 kc down from 30 kc) makes more efficient use of the radio spectrum—more channels but in total they occupy less space. This is necessary, say informed radio engineers, to provide channels for other two-way radio users such as truckers, taxicab operators, construction companies, public transit operators, and others.

The split-channel and frequency conversion action was initiated by the FCC in 1958, and the railroads have been allowed five years to make their radios conform to the new FCC rules. While the majority of the roads surveyed have converted or will meet the November 1st deadline, a few may ask for an extension of time. Southern Pacific, for example, needs more time according to J. N. Albertson, general superintendent of communications, system. He reports as follows:

"We have been able to capture and modify approximately 80% of our 1,270 radios requiring split-channel modifications. An extension of the present Nov. 1, 1963 time limit will be requested since we find it very difficult to capture those units which are operating on railroad rolling stock continually moving, on a system-wide basis, over the Pacific Lines on the West Coast, the Texas & Louisiana lines and the StLSW in Texas, Louisiana, Arkansas and Missouri."

When converting to split-channel operation there is the problem of providing radio service while communications department employees do the actual conversion work, including changing crystals to operate on new frequencies. Most roads have made the change with a minimum of inconvenience.

John W. Hawthorne
ACL

Sylvester F. Witt
C&O

Floyd R. Brown
Unitcast

Tom W. Painter
FreightMaster

PEOPLE IN THE NEWS

ATLANTIC COAST LINE.—John W. Hawthorne, chief mechanical officer, Jacksonville, Fla., promoted to assistant vice president—equipment. Mr. Hawthorne began his career with the New York Air Brake Co. and later served with the Chesapeake & Ohio and the Central of Georgia, before going with the ACL.

BALTIMORE & OHIO.—Elwood A. Fette, sales representative, Louisville, Ky., appointed district sales representative, Houston, Tex., succeeding **Delbert E. Barcus,** retired.

CHESAPEAKE & OHIO.—Sylvester F. Witt, director of traffic research and planning, Cleveland, appointed assistant vice president—market research and traffic planning there.

H. W. Kochanowski appointed supervisor station service, Grand Rapids, Mich., succeeding **S. A. Patrick,** retired.

K. M. Waggott named general agent, Lansing, Mich., succeeding **R. L. Brown,** retired.

T. E. Briers, chief methods research officer, Huntington, W. Va., appointed superintendent methods and procedures there and his former title abolished.

CHICAGO GREAT WESTERN.—Louis L. Crosby has been retained as a transportation consultant by the CGW, at Minneapolis, Minn. Mr. Crosby retired Aug. 31 as vice president of Cargill, Inc.

CHICAGO TRANSIT AUTHORITY.—C. A. Butts, signal engineer, will retire Nov. 1.

DELAWARE & HUDSON.—H. E. Schultz appointed special engineer, Albany, N.Y. Abolished position of construction engineer, Albany. **W. R. Snyder,** assistant supervisor of work equipment, Colonie, N.Y., promoted to supervisor of work equipment there, succeeding **J. W. Cummings,** named track supervisor—system, Albany. Mr. Cummings replaces **N. H. Williams,** appointed bridge and building master—system, Albany. **K. A. Hungerford** succeeds Mr. Snyder. Abolished position of bridge and building supervisor—system at Colonie, formerly held by Mr. Schultz.

DULUTH, MISSABE & IRON RANGE.—Russell M. Downes appointed director of safety and plant protection, Duluth, Minn., succeeding **J. Alfred Dillan,** retired Sept. 30. **Bernard Levenduski** named general freight agent, succeeding **Emil S. Novak,** resigned.

ERIE-LACKAWANNA.—Wilbur Cole, assistant vice president—sales, New York, appointed to the newly created post of assistant division sales manager, Buffalo, N.Y.

Richard B. Wachenfeld, general attorney, named assistant general counsel, New York.

GULF, COLORADO & SANTA FE.—W. C. Parks, trainmaster, Fort Worth, Tex., transferred to Temple, Tex. **J. H. Thomas,** trainmaster-road foreman of engines, Silsbee, Tex., replaces Mr. Parks, and in turn is replaced by **J. E. Gill. M. F. Smith, Jr.** named safety supervisor, Northern division, Fort Worth, to succeed **W. J. Piper,** retired.

LONG ISLAND.—George M. Onken promoted to general counsel, Jamaica, N.Y., succeeding **Otto M. Buerger,** retired.

MILITARY RAILWAY SERVICE VETERANS' ASSOCIATION.—Earl Steuber, office manager and chief clerk to the president and chairman of the board, **Pennsylvania,** appointed secretary—treasurer, Military Railway Service Veterans' Assn., succeeding **Fred W. Okie,** president, **Bessemer & Lake Erie.**

MILWAUKEE.—William Wallace, general passenger traffic manager, Chicago, retired Sept. 30.

NEW HAVEN.—Alfred W. Mahan appointed manager of traffic research, New Haven, Conn. Mr. Mahan has been the New Haven's representative in the Commercial Research Department, **Traffic Executive Association—Eastern Railroads,** New York, since 1958.

NEW YORK CITY TRANSIT AUTHORITY.—Walter J. Schlager, Jr., assistant general superintendent of maintenance of way, named acting general manager. **R. D. Baldwin,** superintendent of maintenance of way, appointed acting assistant general superintendent of maintenance of way.

Supply Trade

Floyd R. Brown, executive vice president of **Unitcast Corp.,** Toledo, Ohio, has been elected president of the company, succeeding **Joseph L. Tillman,** named chairman of the board.

Tom W. Painter, general manager, **Freight-Master** division of **Halliburton Co.,** Fort Worth, Tex., has been elected vice president of the division.

George J. Golden has been appointed manager of a newly opened branch office of the **Farr Co.** at 5423 West Belmont Avenue, Chicago.

OBITUARY

Alexander Allison, 59, manager of mail, baggage and express traffic, **Rock Island,** died Oct. 4.

Edward F. Conway, 64, superintendent of police, **Milwaukee,** died Oct. 1 at Chicago.

John Melbourne Cunningham, 70, retired general freight traffic manager, **Milwaukee,** died Sept. 30 at Winnipeg, Man.

James K. Knudson, 57, member of the **Interstate Commerce Commission** from 1950 to 1955 and administrator of **National Defense Transportation** from 1950 to 1958, died of cancer Oct. 13 at George Washington University Hospital, Washington, D.C.

J. Marbry Norton, retired northern general agent, **Nashville, Chattanooga & St. Louis,** died Oct. 1 at Clearwater, Fla.

M. B. Oliver, 58, assistant director of labor relations, **Atlantic Coast Line,** Jacksonville, Fla., died Sept. 27, after a long illness.

George O. Thoresen, 67, retired freight traffic manager, **Canadian National-Grand Trunk,** died Oct. 3 in Evanston Hospital, Evanston, Ill.

Stanley H. Smith, 77, president and chairman of the board of **Stanley H. Smith & Co.** of Cleveland, and chairman of the board of **Eastern Railway Supplies, Inc.,** of New York, died Aug. 23.

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Containers Take to Rail-Sea Routes

Service between Honolulu and Midwest is now moving forward.

Through movement of containerized freight—movement spanning two-thirds of a continent and half an ocean—is moving ahead rapidly. The points involved: Chicago, Kansas City, St. Louis —and Honolulu.

The shipper pushing the coordinated service is Star Forwarders, Inc., headquartered in Omaha. Thus far, Star has handled shipments out of each of the three Midwestern cities—mostly general merchandise. Eastbound, the containers are loaded with canned pineapple and related products destined for mid-continent warehouses.

● **TOFC and Matson.** Containers move piggyback for the overland part of their journey, and go via Matson Navigation Co. vessels between San Francisco and Honolulu. Star's initial shipment out of Chicago was routed Burlington-Union Pacific-Southern Pacific; the first shipment from St. Louis went Missouri Pacific-Rio Grande-Southern Pacific.

Officers of the forwarding company say they expect the service to be scheduled on a regular basis, with timing dependent on availability of traffic for Honolulu-to-the-Midwest moves. At present, deliveries on the westbound movements are being made 10 to 11 days after departure.

Star is anticipating westbound shipments about every three weeks now, with the probability that schedules will be advanced to a shipment every other week before long. Indications are that service will be made available to other ports in the Hawaiian Islands early next year. Loads have been varied, with some containers carrying special heavy equipment, and others general merchandise.

● **Varied loads.** Containers—8x8x24-foot aluminum fishy-back boxes—are owned by Matson and are being hauled on flat cars equipped for this service.

Edward C. Schneider, Star vice president at St. Louis, noted that the coordinated shipping program will cut over-all transit time, eliminate several costly and time-consuming rehandling operations and reduce the chance of loss and damage to merchandise.

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*Portions of the design are covered by Patent Applications.

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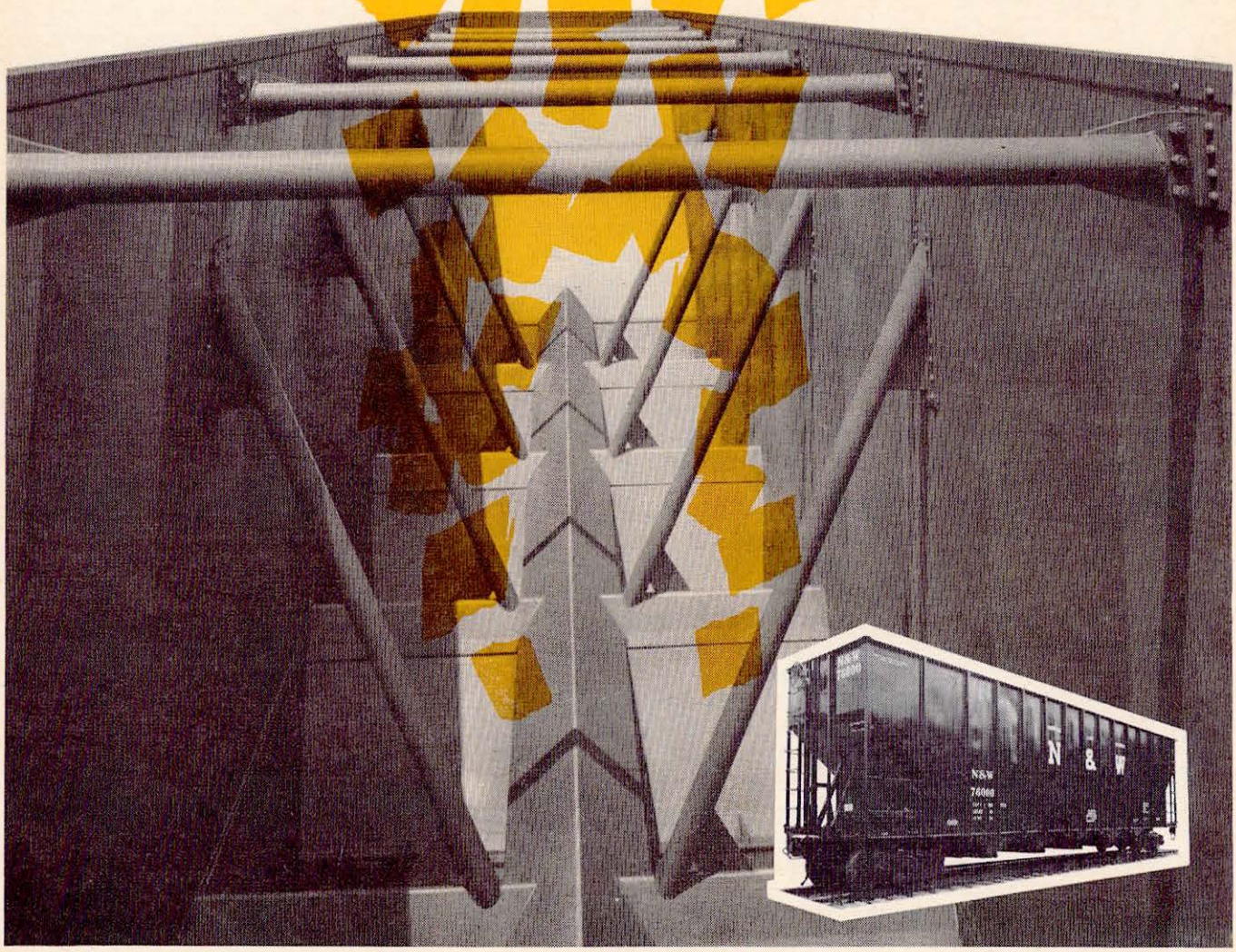

YOU OUGHT TO KNOW

The House Commerce Committee last week rewrote H.R.4701, the proposed Transportation Act of 1963, deleting two sections directly affecting the railroads. These would have given regulatory agencies power to authorize rate experiments, such as guaranteed railroad rates, and would have permitted truckers to use Plans III and IV piggyback services. The rewritten bill contains a stronger provision for the creation of a joint agency board to oversee the making of joint-rate and through-route arrangement between carriers under the jurisdiction of the ICC, Civil Aeronautics Board and Federal Maritime Board. Committee Chairman Oren Harris (D-Ark.) has also instructed his staff to draft a new minimum-rate bill.

Kaiser Engineers has been awarded an $89,000 sub-contract to assist in the design of track and roadbed for the San Francisco Bay Area's planned 75-mile rapid transit system. Dry runs for test equipment will be made on a 4½-mile test track which BARTD is constructing at Concord, Calif.

One of the fastest long-distance freight-train movements in history was claimed recently by Union Pacific and Burlington when a 75-car train, loaded with 2,500 head of prime Hereford yearlings, made the 966-mile run from Hanna, Wyo. to Galesburg, Ill. in 21 hours and 50 minutes.

Northwestern's net income for the first nine months of 1963 was $5,362,979, the best C&NW nine-month figure since 1945. Special credit of $2,108,658, profit on the sale of 135,128 shares of GM&O stock, and $10,010,522 federal income tax and interest refund increased the income figure to $17,067,476. In 1962, Northwestern reported a net loss of $1,600,-562 after special credit for the first nine months.

The first of 50 modern reclining seat coaches that will be added by the Pennsylvania to trains on its New York-Washington line by mid-November, are now in service. Built originally as roomette sleepers by Budd, the stainless steel cars were converted at a cost of $3.5 million or approximately $70,000 per car. New interior appointments were installed, air conditioning and electrical equipment revamped, new disc brakes applied, and running gear reconditioned. Passenger capacity has been raised from 21 to 64, with room for 12 more in lounge chairs of a separate smoking compartment.

Trailer Train Co. directors meeting in Chicago elected James P. Newell president, effective Nov. 1. Mr. Newell had served in this capacity on a part-time basis since 1955, but retirement from duties as the Pennsylvania's vice president, operations will enable him to direct the nation's largest piggyback fleet fulltime. In another action, the board authorized orders for 700 additional flat cars for delivery in three months, bringing to 16,057 the number of cars Trailer Train will have in service.

The CN and the CP have joined the Quebec Trucking Assn. in attacking the Richelieu-Champlain waterway project. J. A. Wright, Q.C., general solicitor for the CP, drew a parallel between the present proposal before the International Joint Commission for a canal to cut the water distance between New York and Montreal, and one which the Commission studied in 1938 and rejected as superfluous. J. W. Graham Macdougall, Q.C., the CN's general solicitor, found the proposal neither economic nor practical, and said it would divert considerable traffic and income from the two roads. Spokesmen for the truckers saw no reason to impose new taxes for building the canal as long as present transportation is adequate.

New president of the Railroad Public Relations Association is Edwin C. Schaefer, Union Pacific's director of public relations. Other officers named by RPRA are James G. Pate, executive assistant, Rock Island, vice president for the West; Edwin G. Long, general public relations manager, Chesapeake & Ohio, vice president for the East, and William A. Lashley, director of public relations, Norfolk & Western, vice president for the South.

REA Express Unit-Haul container service, now operating between New York, Chicago and San Francisco, will be extended when Boston-Chicago-Los Angeles service goes into effect Dec. 1. Containers will move on New York Central passenger trains between Boston and Chicago and via Santa Fe between Chicago and Los Angeles.

The Supreme Court last week refused to review, and thus left in effect, a lower court ruling upholding the ICC's labor policy in rail mergers. The lower court had supported the ICC's position that job disputes arising from mergers could be settled by arbitration without recourse to the National Railroad Adjustment Board. The case arose from the 1960 consolidation of the Chicago & North Western and the Minneapolis & St. Louis. Both the North Western and the operating unions agreed to submit disputes over layoffs resulting from the merger to arbitration. The ICC made this agreement a condition for its approval of the consolidation. However, following a dispute over layoffs at the Marshalltown, Ia., yard in 1961 the unions went to court. They contended that the arbitration agreement extended only to claims for benefits filed by individual employes and that the layoff dispute should be submitted to the NRAB.

Volume number

The Oct. 7/14 issue of Railway Age should be recorded as Volume 155, No. 15. Due to a misprint, an incorrect volume number was published.

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9. Paragraph 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.

10. This item must be completed for all publications except those which do not carry advertising other than the publisher's own and which are named in sections 132.231, 132.232, and 132.233, postal manual. (Sections 4355a, 4355b, and 4356 of Title 39, United States Code).

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I certify that the statements made by me above are correct and complete.

(Signed) Robert G. Lewis,
Publisher.

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TENDERS FOR CONTRACT SGC BLOOR-DANFORTH SUBWAY

Sealed tenders endorsed "Tender for Contract SGC, Bloor-Danforth Subway" and addressed to the General Secretary's Office, Toronto Transit Commission, will be received by the Commission at its office, 1900 Yonge Street, Toronto 7, Ontario, Canada, until four (4) p.m. Eastern Standard Time on Monday, November 18, 1963.

The work for which tenders are invited consists of the manufacture, supply and installation of block signal and interlocking equipment for the Bloor-Danforth Subway, together with miscellaneous work appurtenant and collateral thereto, all as specified in the contract documents and shown on the drawings.

Tenders must be on the Commission's form of tender and must be accompanied by cash or a certified cheque in the amount of $85,000.00 (eighty-five thousand dollars).

The successful tenderer will be required to furnish, execute and deliver to the Commission a performance bond satisfactory to the Commission in the amount and within the time set out in the contract documents.

The contract documents, including plans and specifications will be available at the Commission's Subway Construction Branch, 1138 Bathurst Street, Toronto, on and after Tuesday, October 8, 1963. Copies of the contract documents may be obtained by depositing one hundred dollars ($100.00) with the Commission for each set of documents. Contract documents will be made available to subtrades as well as general contractors. The amount of the deposit will be refunded on the return of the plans and specifications in good condition within thirty (30) calendar days after the opening of tenders.

The opening of tenders will take place at the Commission's office, 1900 Yonge Street, (6th floor Conference Room) Toronto, at 9:30 a.m. on November 19, 1963, at which time tendering general contractors are invited to have a representative present.

The Commission reserves the right to reject any or all tenders.

H. E. Pettett
General Secretary

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work rules issue than lots of railroad employees do.

"I believe this matter of getting accurate information to employees should get the same attention from management as it gives to such questions as the work rules, to deregulation of minimum rates, to the securing of an adequate supply of freight cars and to other matters of parallel importance to the future of the industry. It is distressing to me to see so many employees depend so heavily upon the unions' principal paper, for their information about the railroads.

"For example, I failed to see in that publication any report of Senator Morse's criticism of the leaders of the operating brotherhoods, or Labor Secretary Wirtz's statement that Mr. Luna was responsible for the necessity of arbitration on the two issues of the work rules dispute. If either of these gentlemen had criticized railroad managements, I would have expected to see a report on the front page.

"It seems to me that most railroads have failed to use the opportunity they have in their employee magazines to keep employees informed about railroad problems and goals, and to securing employee understanding and cooperation. This is a managerial question since, of course, when employee magazines avoid controversial subjects, they do so (I suppose) as a matter of company policy, rather than by the editors' own decision.

"In some of the employee magazines with which I am familiar, I note the lack of reports on subjects that might be controversial. During the period of dieselization, I do not recall having noticed any discussion of the profound effects of this change-over on some railroad occupations; or of the economic and technological reasons for the change to diesel power. I likewise recall nothing in these magazines explaining the work rules issue

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to the total number of employees is minute. We would welcome a larger number of such subscribers —but we recognize that a paper edited primarily for railroad management cannot serve adequately as the sole means for conveying industry information to all employees in the ranks.

Ways to get the word around

There is, of course, the reprint device—whereby management can (and often does) obtain reprints of articles from this and other publications, mailing them to employees or other specialized groups that might be interested. Take a specific case—the completely objective and factual article "Are the railroads rich or poor?" in our Sept. 9 issue. Quite a number of reprints of this aticle have been bespoken —presumably for distribution among people who do not ordinarily see Railway Age.

Opinions differ on whether employee magazines should get into these controversial questions or not, and we have heard about as many plausible arguments on one side of the question as another. Some employee magazines do discuss these issues.

There is probably no one answer to a problem as big and important as this one. There's no law against using many methods. Some may succeed and some may not. Some may serve effectively in some places, and among some classes of employees, and not in others. The central problem still remains—that is, that employee misinformation exists, and that the persistence of such misinformation is injurious to railroads, to their employees and to the public.

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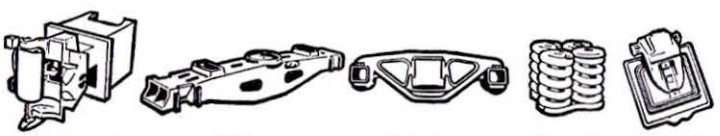

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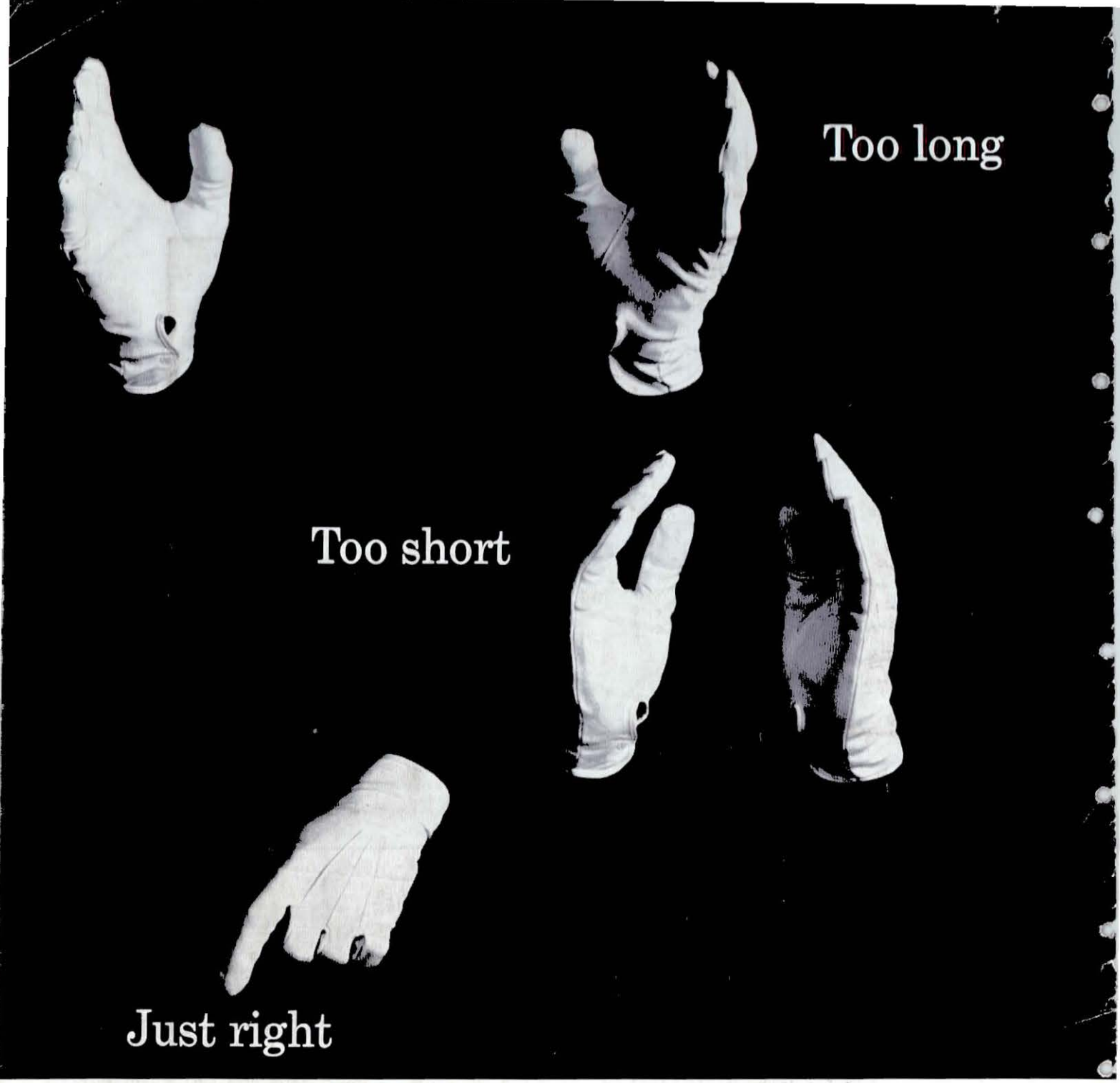

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